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20010921 126

## THE SEARCH FOR INCREASED KNOWLEDGE, REACH AND PRECISION IN WAR

### CHAPTER ONE – WHAT HAS CHANGED

During the night of 24 March 1999, heavily-loaded warplanes battered their way through the thick clouds that lay across the border of Yugoslavia, their lights blacked out, their radios silenced, searching for the release points programmed into their memories. From there they would attempt to destroy radars, missile and gun emplacements, command centers and communications relays<sup>1</sup>. Nineteen governments had agreed to send those planes to kill Yugoslavs and destroy their property even though these were inside the boundaries of their own country. The attackers' aim was not to conquer Yugoslavia or prevent Yugoslavia from conquering them, nor even to overthrow the Yugoslav government. It was to extend an invitation. More precisely, it was to re-extend an invitation that had already been refused – for Yugoslavia to determine, along with its neighbors, a way of dealing with its internal problems that was acceptable not just to Yugoslavia, but to everyone at the table<sup>2</sup>.

This rather strange use of military force was the result of a little-recognized phenomenon. That phenomenon is an evolutionary step which has occurred in international conflict. That step results from increasing interdependence and communication between nations, which reduces freedom of action for some and increases it for others. It rests upon a conception – which is accepted by a growing number of states and non-state actors – that **wars and other forms of international conflict stem from the collision of policies which are espoused by two or more opposing groups; that these groups are relatively small, elite circles within their respective countries or populations; and that conflict is resolved by acting on the consensus inside that small circle.** In itself, this concept represents nothing new – it has always been true, but it has been largely irrelevant for the military strategist, until now.

However, here at the beginning of the 21<sup>st</sup> century, the 550 year-long progress of knowledge, reach and precision in military practice has arrived at a point where the source and foundation of the opponent's policy is increasingly relevant to both strategist and targeteer. It is now practical to aim directly at the human center of gravity of an opponent's policy. NATO's Kosovo adventure is but one example of the vast implications of this historical development, which promises to re-shape the use of armed force, diplomacy and the very texture of international relations. Among other things, **it has given rise to a successor to the model of total war – one glimpsed in Yugoslavia, but whose breadth and scope is seen most clearly in Saddam Husayn's Iraq** – and has confronted the United States and its allies with the spectre of a mounting number of 21<sup>st</sup> century challenges which confuse and frustrate their 20<sup>th</sup> century national security structures. This paper explains that development, and examines some of those implications, from the point of view of a military practitioner.

### **The traditional school**

It has long been the accepted conception of war that it stems from politics and social causes, but represents a breakdown of those processes. War is commonly thought of as a self-contained phenomenon through which a contest is settled by one party proving itself superior at conducting and sustaining warfare. The conduct of the contest itself is essentially unrelated to the processes that led to war, much as if two children had compared their ability to sing, had an argument over who was better, and ended up wrestling and hitting one another. The outcome of the fight will establish who can fight better, rather than who can sing better. War has long been seen as directly analogous to this child's squabble, being a distinct art or science which is – purposely or accidentally – chosen to settle a disagreement, its practice being dictated by its own natural rules, which are in all major respects totally independent from the particulars of the disagreement it is settling.

This understanding has led, over centuries, to a firm appreciation of the potential impact of war on politics but, nonetheless, has given rise to the study of war as a discipline almost entirely separate from politics. This study is characterized by a central search for the “right” way to conduct war, which will nearly guarantee victory, making war a reliable tool for achieving political ends. It is generally accepted that this discovery will eventually come in the form of “principles of war” and a set of formulae from which generals and admirals can invoke an appropriate response to any situation in which they find themselves. The search for such formulae is called the study of “military strategy,” which is separate and distinct from “strategy,” per se because its concern is exclusively the winning of wars. In much the same way, “military history” records the manner in which wars were conducted in the past, often without any but the most cursory reference to the *causus belli* of each. In the course of this study of war as a discipline unto itself, it has come to pass that the aim of both the study and the practice of war is “to win,” meaning – in its most abstract sense – to defeat the military strategy of the opponent. War, in this way, is surrounded by a tradition of philosophy and perceptions which sets it apart from all other activity. Accordingly, social scientists for decades have posed questions such as, “Why do wars start?” and “How can wars be avoided?”, much as if they were examining the outbreak of plague, tempest or some other tragic whimsey of Nature. This traditional view both depends upon, and reinforces, the notion of war as a self-contained process, which is entered into, and exited from, by passing over a distinct threshold beyond which other processes are not relevant.

Shakespeare captured the concept of war as a discontinuity in human affairs with his exclamation, “Cry havoc, and let slip the dogs of war!” It conveys the end of a rational search for a desired outcome, and a surrender of the problem to resolution by a violent gamble. This represents the popular, traditional idea of war, as the means of last resort for settling disputes, which leads in turn to a commonly-accepted understanding of its relationship to diplomacy, as voiced by a former Chair of Brandeis University's Peace Studies Program<sup>3</sup>:

The resort to international violence in fact is conventionally regarded as a

failure of diplomacy, rather than simply its continuation by other means...the conventional view [is] that the purpose of diplomacy is to avert or stop wars.

### **The supremacy of policy**

It bears noting that the apparent reference to Clausewitz' famous dictum is not quite right. He said war was the continuation of policy, not diplomacy<sup>4</sup>. The difference is important, because it plays a role in a construct which describes the traditional view of the functional context of war, namely – conflict arises from “natural” sources, such as a clash of cultures or religions, the personality of leaders, or economic conditions. Policy (a rationale which relates interests to actions) is formulated to deal with conflict and is implemented through either war or diplomacy, *in mutual exclusion*, depending upon the cost, time required and risk of each, as well as upon the temperament of the person or persons making the choice. According to this construct, then, war does its job by bringing about the defeat of the enemy, with the question of how that defeat will serve policy being left for diplomats, rather than for the military strategist to decide. Diplomacy, on the other hand, creates or maintains peace by ending or averting wars, on terms that are agreeable with policy. Defeat of the enemy prepares the ground for diplomacy by eliminating him or rendering him more agreeable by threatening him with elimination, (which could be done in some cases simply by holding him at an obvious disadvantage even though that might not itself pose a mortal hazard.)

In the spring of '99, however, NATO had no desire to eliminate the Milosevic government or hold it at a disadvantage. While its jets were sent to attack Yugoslav armed forces in a campaign that seemed to reflect the traditional construct, the objective they actually were pursuing was entirely untraditional. This was due to NATO's recognition of the fact that, ultimately, the disposition of the Albanian minority inside Yugoslavia could only be guaranteed by the Yugoslav leadership itself. When Milosevic broke off negotiations on that subject, NATO's only hope of preventing ethnic cleansing in the long term rested on its ability to force him to re-engage. Its war, then, was not an attempt to thwart Milosevic's ethnic cleansing. It was an attempt to force him back to the negotiating table, where he might be convinced that his best option lay along some other path<sup>5</sup>.

### **A break with the past**

This represents something new – not unprecedented, but yet something quite different from the predominant way war has been used in the past. It is a construct that has been slowly emerging since the Second World War, at a pace in keeping with the evolutionary development of modern strategy. As an evolutionary step, it is in many ways no so very different from the traditional, and this accounts for the lack of general recognition that a change has, indeed, taken place. Yet the implications of the new construct are highly significant, and may profoundly affect war, diplomacy and policy in the 21<sup>st</sup> century, as well as the organizations that practice them.

This construct places emphasis on policy as the source of conflict, rather than inevitable “natural” influences. Conflict arises when two policies held by different groups cannot coexist, and it is resolved when one group modifies or



abandons its policy or convinces its opponent to modify or abandon his. Convincing the opponent to take such steps is a matter of changing minds. That is, the opponent group adopted their policy in the first place on the basis of their estimations of the benefits and risks attending that policy, which they calculated on the basis of their appraisal of relevant factors in their environment. By changing minds about those estimations, they can be convinced to modify or abandon their policy, thus resolving the conflict. Those estimations can be changed in a number of ways, ranging from the entirely benign to the extremely hurtful. In this construct, **diplomacy and war both serve exactly this same function – their sole purpose and objective is to change minds. They are one and the same, the only distinction between them being the level of hurt that is inflicted in the process.**

#### **A new objective for the warfighter**

For the practitioner of war, the significant difference between the established concept of war and the evolved reality of it, is its objective. The objective of war is no longer to defeat the enemy's armed forces or destroy his nation's ability to resist or, as was once taught, "to hurt the enemy in every way possible."<sup>6</sup> The evolved concept of war recognizes that policy lies at the heart of conflict and that, as a result, the most efficient way to end conflict is to cause the enemy to change his own policy.

The practitioner must be wary of the temptation to reject any worry about what the enemy thinks and to concentrate on developing the military force needed to crush him and then simply dictate a new policy. Certainly, the projections of what a nuclear war might be like suggest that war has grown so potent that it could force an opponent to abandon a policy regardless of what he thinks. But this is a chimera. There is no shortage of cases where attempts to resolve conflict favorably by using war to debilitate an opponent, without changing his mind about his policy, have not been successful in the long run<sup>7</sup>. A defeated leadership's policy often lives on underground, perversely gaining strength from the shame of defeat, and eventually re-asserts itself.

Only when it is practical to depose opponent's leadership, enforce one's own policy in place of theirs, and over the course of decades to reshape the opponent's society, is it possible to resolve a conflict in this way. This is a very high risk approach, and extraordinarily expensive. The United States did so with its own ruined South, and following WWII, with Germany and Japan. By investing in an occupation and paying to re-build a conquered territory, replete with new institutions and political and economic linkages, it is possible to stabilize a forced or dictated outcome. But risk remains. Both the Confederate flag and the long-forbidden Japanese Anthem are venerated today. In contrast, a policy which a leadership chooses to abandon is more easily buried forever.

#### **"Strategic targeting" takes on a new meaning**

For this reason, this new construct focuses on the problems of changing the opponent's own thinking regarding his policy, rather than on using overwhelming force to make his thinking irrelevant. Also, as Chapter Three will explain, the strategies for employment of overwhelming force are rapidly becoming less practical in the economic and political environment of the 21<sup>st</sup>

century. On the other hand, strategies that have policy change as their objective are not only more practical today, in terms of international and domestic political impact, but are more direct, less costly and involve lower risk overall. However, this new understanding of conflict requires the practitioner to exercise care, particularly if confronted with a time-sensitive crisis such as a coup d'etat or an invasion, to keep in mind that the objective of all actions – even those against the opponent's military forces as they attempt to implement the opponent's policy – is to change minds among the opposing leadership. Stopping the enemy advance is not enough. Even defeating the enemy and obtaining his surrender is not enough. These are not the sources of the conflict, and they are not the objective. The strategy and the actions stemming from it must consistently aim at elimination of the conflictual policy, preferably by the opponents, themselves.

The chief implication of the new construct is that war is no longer seen as being solely aimed at eliminating an opponent or threatening him with elimination, but is now seen as aimed at changing his estimations regarding a particular policy. A secondary, although still important, difference is that the new construct recognizes that war and diplomacy are subsets of the same activity, and not only go on at the same time but, when properly conducted, naturally reinforce and supplement each other. This new perspective permits recognition of the fact that peace is not ended by a declaration of war, but rather that a war declaration is simply an acknowledgment that peace does not and cannot exist, because another party's policy is so hostile as to exact each day an insupportable cost. The goal of war being to end this conflict of policy, it is not the opposite of peace, as we have always supposed. Instead, it offers the most direct path back to peace, forcing by virtue of its cost and relentless logic one party or the other – and sometimes both – to sacrifice their conflictual policy in order to return to a just and meaningful life.

#### **Two ways to change the opponent's mind**

"Changing minds" is, perhaps, a euphemism. In most countries involved in conflicts, there are a relatively small number of individuals whose views are critical to the support of the policy at issue. To "change the mind" of an opponent can mean, in one sense, causing one or more of those individuals to reach a new conclusion. In another sense, it can mean eliminating or sidelining one or more (perhaps all) of those individuals, so that the "corporate opinion" of the opponent undergoes a change. Ultimately, powerful, inflexible members might have to be eliminated by military means. It may even be necessary to occupy their capital in order to physically compel a change in the opponent's consensus.

Even though the concepts of conflict and war have evolved, this has only changed the understanding of how war works and how conflict is resolved. It changes nothing about the nature of fighting or the lengths to which it might be carried. The need to conquer, depose and occupy – to conduct total war – may still occasionally arise, because it is not what is being fought about, nor who is doing the fighting that determines how long and how hard a fight will have to be pressed. **Rather it is determined only by exactly who on each side has the power to modify their policy, and to what extent they are susceptible to the tools available to the other side.**

That is why this new construct should not be taken as a rejection of the familiar forms of warfare – in which armed forces struggle to protect strategic areas or to preserve a regime – but rather as a framework that guides effective engagement and resolution in all conflicts, across the entire spectrum. The revolutionary-sounding description of the objective of both war and diplomacy as “changing the opponent’s mind,” in reality simply describes what has always happened at termination of any conflict throughout history – one side always “decides” that it is no longer in their interests to continue, either because they’ve re-calculated the cost-benefits trade-off, or because they’ve been replaced. This says nothing about limiting the violence or destruction necessary in order to change those minds.

### **Making sense of the 21<sup>st</sup> century**

The real value of the new construct is not that it promises to somehow make violence obsolete, but that it helps to make sense out of the burgeoning melee of wars, failed states and international strife of the early 21<sup>st</sup> century, for which the familiar doctrines of total war seem so inadequate. The single model that will allow the practitioner to respond effectively in the years ahead takes as its starting point that every conflict has at its root a collision of policy, and the individuals who control policy on each side are the true, ultimate targets of whatever forces may be employed to resolve it. The messages of confidence circulating between these individuals reinforce a consensus which supports government implementation and maintenance of the policy. Messages of doubt, alarm or dissent within this circle give rise eventually to an internal debate regarding the modification or abandonment of the policy. Both diplomacy and war aim to precipitate that debate and conclude it in favor of policy change.

Until now, it has not been possible to aim directly at this consensus. Rather, it has been affected only indirectly, as news of battles and enemy reactions, and perhaps some experience of hardship reached the leadership. WWI Germany offers a good example of the potential of leaders to remain isolated from the real implications of their choices for years, and how a change of one opinion – that of General Erich von Ludendorff – can drive a sudden, comprehensive shift in leadership thinking<sup>8</sup>.

**Over the past fifty years it has become increasingly possible to directly affect the leaders’ perceptions, due to increases in knowledge, reach and precision.** If exploited, this promises to greatly reduce the time and sacrifice required to affect the opponent’s policy. For the war fighter, this evolutionary development means a wider range of targets, a broader selection of instruments and more options for strategy. Ultimately, it also means new doctrine, if not new organization, for a closer intermingling of the government institutions involved in many sub-disciplines of statecraft, including foremost those that we now know as diplomacy and defense.

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<sup>1</sup> U.S. Army General Wesley Clark, SACEUR briefing to North Atlantic Council, 25 Mar 1999

<sup>2</sup> Grant, Rebecca, The Kosovo Campaign: Aerospace Power Made It Work, The Air Force Association, Arlington, VA, 1999, p4

<sup>3</sup> Brown, Seyom, The Causes and Prevention of War, St Martin’s Press, New York, NY, 1987, p79

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<sup>4</sup> Clausewitz, "Note of 10 July 1827," *On War*, trans. and ed. Michael Howard and Peter Paret, rev.ed., Princeton University Press, Princeton, NJ, 1984 p69

<sup>5</sup> Dr. Jamie Shea, NATO Press Briefing, HQ NATO Office of Information and Press, Brussels, Belgium, 25 Feb 1999

<sup>6</sup> Rosenberg, Gunther, "The Military Revolution of the 17<sup>th</sup> Century," *Makers of Modern Strategy*, Ed. Peter Paret, Princeton University Press, Princeton, NJ, 1986, p61

<sup>7</sup> Black, Jeremy, *Why Wars Happen*, New York University Press, New York, NY, 1998, p 193

<sup>8</sup> Ikle, Fred, *Every War Must End*, Columbia University Press, New York and London, 1971, p36

## CHAPTER TWO – HOW THINGS USED TO BE

In order to grasp the most recent steps in the evolution of war, it is necessary to place it in the context of history. The very early written accounts of battles and discourses on war reveal that the discipline was well refined, even then. In his commentary on the battle of Plataea in 479 B.C., J.F.C. Fuller notes<sup>1</sup>,

...so far as war is concerned, the first thing which strikes us is that in the fifth century B.C., in all its essentials the art of war was almost as highly developed as it is to-day.

On or about the date of that same battle, Sun Tzu wrote his famous guidelines by drawing on a long-established and extensive corpus of ideas and practices which had already been accumulated and organized by generations before him.<sup>2</sup> The concerns facing war-leaders twenty-five hundred years ago are immediately familiar to today's practitioner, yet that span of years has not been without change. In fact, during the "modern" period there has been a continuous evolution in the practice of war as its political and technical environments have developed, as well as evolution in its purpose.

### **The art of war, 500 years ago**

The "modern" period of European military history, from which the American variety descends, is widely accepted to have started in the middle of the 1400's. It is worth noting that warfare in Europe at that point was quite backward. Its next four hundred years would largely be spent in re-ascending to the zenith achieved by Rome's legions before the birth of Christ.

Gunpowder had already made its presence felt – a technical development widely thought to have brought an end to the dominance of armored knights. Landholding knights and their retainers had been the principal warriors in Europe since not long after the fall of Rome, and were the only class in the feudal system with that privilege and duty. They were bound by chivalry to abstain from fighting unless they were granted license by their overlord or assured by the Church that the cause was just. Their armies could topple a distant kingdom, as the Normans and the Crusaders had, but such events were rare conjunctions of wild risk-taking and tactical blunder. On the whole, feudal armies and the sort of war they fought were limited to quarrels between neighbors in which some property might change hands or an "outlaw" noble might be brought to justice, mainly because that alone was what the age called for.

It was economics, not gunpowder, that undid the medieval way of war<sup>3</sup>. With the rise of money economies came knights-for-hire. For the first time in many centuries, the knowledge and skill required to fight a war could be purchased by anyone who had the means, rather than being restricted only to those who could convincingly argue that they had the hereditary right and the Church's blessing to do so. Money also opened military service to a far broader segment of the population, increasing the size of forces but degrading the role of moral constraints against desertion, treason and mutiny. The introduction of gunpowder raised the cost of armed forces, exacerbating the tendency of larger

polities to use their greater fiscal resources to subjugate smaller neighbors in order to become richer and, therefore, more militarily powerful. The social upset that money produced also intensified the struggle between dynastic families, creating a seller's market for military services.

However, the larger armies had larger logistical requirements. Without a technical advance in transportation, their reach actually decreased. They were largely shackled to fortified supply depots. These were re-built to resist cannon, so war evolved into a contest between large, slow, unmaneuverable and unreliable armies facing each other over the bastions of a fortress under siege<sup>4</sup>. The time and expense required by this form of war limited its value, but it was the backbone of the period's endemic civil wars, feuds and trade disputes.

#### **The introduction of discipline and drill**

Starting In the later 1500's the contest between mercantile powers and dynastic powers began to re-draw the map of Europe. In response to this vicious competition, many states began to address the shortfalls of their armed forces by the use of discipline, drill and junior officers to instill these virtues. The states themselves took control of recruiting and pay. The size of armies was reduced and regimental organization adopted. These innovations combined to make armies far more reliable – although they remained largely mercenary – and more maneuverable on the battlefield, effectively increasing the precision with which an army could bring its combat potential to bear upon enemy forces.

This great powers used war as a strategic tool throughout their struggle to survive and thrive in the emerging intercontinental economy. They began to use their improved capabilities to conduct campaigns, and to move against more-distant adversaries. But, even with well-drilled troops, confrontation of two armies in the field remained difficult to achieve because it was not possible to deliver and position an obviously superior force fast enough for it to engage the enemy before he could see its superiority and depart. Thus, battle remained possible only with mutual consent. Since it had become costly in terms of required investment in soldiers, each of whom now needed years of training, battle was often avoided. Positional and siege warfare were therefore the prevailing forms<sup>5</sup>. War at this stage did prove capable of both achieving and defeating a dynast's conquest of distant provinces. Even so, it remained a limited means – a tool to increase or decrease a great power's influence, but not one capable of overthrowing him.

#### **The advent of the loyal soldier**

The end of the 1700's finally saw armies moving away from fixed logistic bases – first, the forces of revolutionary France but then nearly all of Europe followed suit. As a sense of nationality arose among common folk, troops could personally identify with their army's cause, and thus became trustworthy enough to be allowed to leave the main body in order to requisition their own food. These more-reliable soldiers could also range ahead of main bodies as scouts and skirmishers, firing and taking cover independently. These truly huge armies were further articulated into divisions and corps. The greater mobility made it possible for the first time to crush an enemy's army by forcing it to fight at a time and place of one's own choosing. The improvements in reach, precision and –



from trustworthy and motivated scouts – knowledge made war a decisive contest of maneuver which could undermine an enemy's very existence as an independent polity<sup>6</sup>. It aimed to accomplish this by sharply reducing his ability to resist – meaning his armed forces – and seizing his administrative and economic centers.

Through the 1800s, the rise of conscription – “national service,” which provided a vast supply of relatively willing and reliable soldiers – and of road networks, railroads, the telegraph, large steel casting, mass production, rifled and, eventually, auto-loading weapons, all combined to further increase reach, and to produce a quantum leap in the precise delivery of destructive force. The numbers that could then be committed, and the previously unimaginable casualties, changed the nature and the “look” of battle. Frontal assault became suicide, and turning the flank of a deployed enemy became nearly impossible<sup>7</sup>. Barring a fortunate arrival of decisive force where an enemy position was just in development, a stalemate would likely develop. In reaction, rather than maneuver, the decisive element became timing. More detailed knowledge of the enemy's forces and transportation network was compiled to permit elaborately-timed plans that choreographed demolition not only of enemy forces at the front, but back along their lines of deployment, through staging and mobilization areas, paralyzing the enemy right into its heartland. Thus, by the end of the century war had become total, capable of wiping a government out completely.

#### **The importance of people in total war**

Also during this period, the power of mass market economics, the vulnerability of extensive bureaucracy, and the rise of revolutionary philosophy ended the epoch of government insensitivity to the concerns of the burgeoning governed. The evolution of war was part and parcel of this trend. By 1900, war already counted on the citizenry for reliable, motivated manpower, and due to its new, unlimited nature, they were increasingly its ultimate target. The elite of even totalitarian countries began to feel they had to accommodate public sentiment in their military strategy or face downfall. This led them to consider the will to fight of the opposing public as a target<sup>8</sup>, and to try to insulate their own public with censorship and propaganda. Knowledge began to act as a strategic delimiter. Another aspect of the importance of knowledge was illustrated in this period by “revolutionary” and “guerrilla” resistance to European colonialism and by the communist uprisings in Russia and China. In all of these, knowledge – of the methods, whereabouts and activities of their opponents, and of their own people's condition and motivations<sup>9</sup> – formed the greatest strength of the civilian side and also the greatest weakness of the rulers. Using this knowledge as a resource, the revolutionaries managed to draw from the population the same motivated, reliable foot soldiers which gave Europe's industrialized nations much of their combat power. Without anything approximating the reach and precision of the well-equipped and drilled government forces, they still were able to defeat them.

By the mid-1900's armor had redressed the dangers of rifled weaponry, rehabilitating maneuver as a technique. Motorized vehicles and robust radio communications had reduced the criticality of timing. Aircraft had further

enhanced the reach of armed forces. Sophisticated intelligence networks had been augmented with technical means of obtaining knowledge about opponent capabilities and intentions. Under the pressure of totalitarian political philosophy, these changes in reach and knowledge enabled the concept of war to further evolve into a means for imposing one's own values on a "barbaric" or "outlaw" country, by seriously disrupting civilian life and industry within it and crushing its defense. War at that point had evolved beyond simply settling disputes between governments, and was seen as an ultimate struggle that weighed and judged between fundamentally opposing ways of life<sup>10</sup>. Large arsenals of nuclear weapons and ICBMs provided the potential for truly apocalyptic resolution of such differences, yet the fear inspired by the absence of effective countermeasures prevented further evolution in that direction. In fact, during the latter half of the century, war's evolution was profoundly re-directed by several developments.

### **People and policy in post-apocalyptic war**

As mentioned earlier, after WWI strategy became sensitive toward the public's determination to see its values protected. That became, upon war's evolution to encompass apocalyptic moral conflict, a vital, permanent political factor in many nations, like the United States. That factor increasingly involved industrialized powers in civil and other wars in non-industrial countries after mid-century, but their military strategy in these conflicts was limited by the imperative to prevent nuclear weapons from coming into play<sup>11</sup>. Their strategy was also challenged by their opponents' knowledge-based strategy of defeating the "host" government by depriving it of the supportive population it required to defend itself from total war.

The role of the populace in total war was understood by the industrial nations to be central – war itself resulted from a government responding to some problem confronting its citizens by establishing a policy which other nations could not accept. Simple elimination of governments and their objectionable policies were not sufficient. If no substitute solution was provided, the population's war sentiment could not be expected to diminish, and it was likely that they would eventually seek to reinstate the policy that the war had just eliminated. Conversely, if an alternative policy made another solution available to the populace, the impetus toward war might be eliminated. It was this observation that eventually led the industrial countries to a successful adaptation to knowledge-based or "revolutionary" war.

Further increases in reach and precision, provided by innovations such as air mobile troops, guided bombs and counter-battery radars, complicated the revolutionaries' military strategy. However, success most often came from seeking knowledge of the policy which the revolutionaries fought against and of the policy which they fought to establish, then providing their supporting populace with a satisfactory alternative. Alternative policies were often rejected by the host government, but in most cases where they were implemented, the conflict was resolved without military victory by the revolutionaries<sup>12</sup>.

Along this 550-year trajectory war has changed from a trial-at-arms performed under warrant, to a means of enriching oneself at the expense of a

neighbor, to a tool for incorporating the territories needed for one's prosperity, to the key to empire, to a weapon for eliminating rival governments and even for destroying rival peoples. A common misconception holds that war evolves in response to technology – that, essentially, its character has changed over the past five centuries because creative technicians have invented new weapons. However, the foregoing demonstrates instead that, at each stage, its technical development was pushed by economic and political factors, which necessitated investment in technical advances which had been thought of (in some cases, experimented with) earlier.

A second, and more significant, misconception which is also debunked by the foregoing history is that war's evolution is simply explained as a march toward ever-increasing destructiveness. In fact, the single constant in all of the advances listed above is that each one of them in one way or another has enabled more direct application of national power against those individuals on the other side who are responsible for the conflictual policy. Although most of the advancements seem to focus on maneuverability or firepower, they are in fact technical improvements in the ability to send bad news to the opposing leadership. The penultimate step, taken over the past 40 years, recognized knowledge as a critical factor in achieving a desirable outcome, both for understanding what that outcome might be, and for identifying the most efficient and effective ways to apply power in order to achieve it. This set the stage for the next step.

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<sup>1</sup> Fuller, J.F.C., *Military History of the Western World*, Vol I, Funk and Wagnalls, New York, NY, 1954, p51

<sup>2</sup> Keegan, John, *A History of Warfare*, Vintage, New York, 1993, p. 202

<sup>3</sup> Gilbert, Felix, "Machiavelli: The Renaissance of the Art of War," *Makers of Modern Strategy*, Ed. Paret, p12

<sup>4</sup> Guerlac, Henry, "Vauban: The Impact of Science on War", *ibid*, p69

<sup>5</sup> Rothenberg, *op cit*, p43

<sup>6</sup> Palmer, R., "Frederick the Great, Guibert, Bulow: From Dynastic to National War," *ibid* p95

<sup>7</sup> Rothenberg, Gunther, "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment," *ibid* p.299

<sup>8</sup> *ibid*, p.302

<sup>9</sup> Shy, John and Collier, Thomas, "Revolutionary War," *ibid*, p.842

<sup>10</sup> van Creveld, Martin, *The Transformation of War*, The Free Press, New York, NY, 1991, p10

<sup>11</sup> Carver, Michael, "Conventional Warfare in the Nuclear Age," *Makers of Modern Strategy*, Ed. Paret, p779

<sup>12</sup> Shy and Collier, *op cit*, p815-862

## CHAPTER THREE – WHY CHANGE OCCURRED NOW

### Section One: Economic forces outmoding “Total War”

Over the past 550 years, European states were encouraged to invest in new warfare due to a threat of domination by their rivals as the result of changing economic conditions. The threat facing the United States today is not so easily recognizable – there are no rivals ready to gain sway over a large percentage of the world’s wealth, thus becoming able to afford the military means to eliminate U.S. influence. Instead, the danger posed by today’s economic and political interplay is that of erosion of the potency of American assets other than its wealth, *vis-à-vis* that of smaller countries – particularly of its military means.

This erosion stems from the realization, on the part of several governments and non-state actors around the world, that increased knowledge, reach and precision are now available to them, too, as the result of developments explained below. Because these increases provide even very modest armed forces with a capacity for synergistically augmenting non-military instruments such as political or economic tools, this development poses a hazard for great powers. It enables smaller states or non-states to apply their limited power more directly and effectively, while staving off a great power intervention by preventing or avoiding the consensus to intervene from forming within the great power’s leadership<sup>1</sup>.

Potentially, it can become a favorite method for asymmetrically challenging governments which, like the United States, entrust their defense to armed forces designed to prosecute total war. That is because the large, expensive deployments of a “total war” military, and the attending implication of willingness to engage in highly destructive operations, require a broad and firm consensus beforehand. Indeed, when other, less powerfully-equipped countries face a heavily-armed opponent that they cannot hope to beat in a military or economic showdown, their most effective approach will always be a strategy to get the opponent’s leadership to change its own policy, by employing their limited means in ways calculated to influence the opposing leaders’ perceptions. Vietnam, Iraq and Somalia, although crude antecedents, demonstrate the potential.

Such a strategy depends upon the opponent’s knowledge of the interests which must be balanced within the U.S. government before it can act – information which the Internet and satellite TV is making more and more accessible to potential adversaries every day. It also depends on their reach, which is also growing with the same technologies, as well as with the transportation network that is exploding to support the global economy. As for precision, in this context that term concerns the agility with which even small, seemingly unsophisticated states and non-states can coordinate and shift between political, economic, diplomatic and military demonstrations to achieve their ends<sup>2</sup>. This is in sharp contrast to the rapidly multiplying constraints now faced by the United States and other great powers. The resulting loss of freedom of action, upon which the United States currently depends, may have

much the same decisive effect as pike and musket ball had in the past, between rival empires.

#### **More economic competition means less flexibility**

Today's broader global economy already provides smaller states more options for action than larger ones, and this is likely to increase dramatically in the next century. For example, the U.S. containment policy toward Iran and Iraq is undercut by other capitalist countries who are anxious to find customers. With China, Russia and the former S.S.R.s entering the military and general commercial market, a single great power will find it increasingly difficult to limit anyone's commerce. Nor can even the greatest powers ignore the interests of its trading partners with impunity any longer – greater interdependence due to market specialization poses the threat of economic penalty upon unilateral policy-making<sup>3</sup>. Yet, at the same time capitalist economies are becoming more closely inter-linked, the world-wide web and satellite television are pitting them against each other in sharper competition for markets and capital.

#### **Economic dependence equals vulnerability**

If this conjures an image of many more ships, each sailing their own direction, in the same narrow sea, it must also be a sea with a strong and treacherous current. The global capitalist economy is built upon a single class of commodities – oil and natural gas. These provide nearly all the industrial world's motorized transport, nearly all heating, nearly all lubrication for machines, much electrical generation, many industrial furnace and commercial oven operations, most chemical feedstocks including those for nearly all synthetic fibers, and much agricultural fertilizer production. The tremendously wide dependence upon oil and gas by so many key sectors of the economy, and the profound adaptation of industrial societies to that economy, have created a situation for which no previous parallel exists. While a single government or cartel could not deprive the industrialized powers of oil or gas, they could easily cause a general price increase<sup>4</sup>. Demand would decrease somewhat, but there is a point at which oil and gas must be purchased, regardless of the price. There is also a point in each business and household budget where the overall expense becomes unbearable, and bankruptcy ensues. Should these points be reached – and no one knows exactly where they lie – by a small but significant fraction of society, such bankruptcies will cascade rapidly into a general economic collapse. Less frightening, but more certain and therefore perhaps more compelling, is the likelihood that a significant rise in oil and gas prices will produce "cost-push" inflation, resulting in a recession or depression<sup>5</sup>.

The final hazard stemming from industrial capitalism's addiction to oil and gas is the unknown market psychology among the world's significant oil exporters as they contemplate the bottom of their oil reserves. Some may cease production to provide a buffer against import costs. Others may do the opposite, to maximize profits before gradual price increases trigger replacement technologies. Regardless of the actual amount of oil remaining in the ground, such concerns could start to have important effects on oil exports in the near term, since the ratio of some exporters' proven and probable oil reserves to their annual production at the beginning of the millennium was as low as five<sup>6</sup>. And

this is only part of the picture.

#### **Increased risks in traditional deployments**

In addition to complex and turbulent economic and political interactions, there are growing pressures on the military instrument of national power. Nuclear retribution must now be considered a possibility for punitive expeditions of armed forces in or adjacent to the territories of nearly a dozen countries, with others expected to join the list shortly<sup>7</sup>. And it is imaginable that, if one of them invaded his neighbor, he might announce that third party deployment into or near that country also would be met with nuclear weapons. Further complicating any military strategy is the "CNN effect" which rushes military intervention and insists on speedy resolutions. While these environmental parameters grow more demanding, the inevitable decrease in budget share will provide either fewer forces, less equipment, decreased training, or perhaps all three. The current U.S. military instrument, designed largely for total war, is fast becoming a liability rather than a practical tool.

#### **Minimizing strain on the fabric of international relations**

Finally, in a world in which the future alignment of interests among new powers and the ambitions of future rivals are hardly imaginable, there is increased value perceived in actions that enhance the stability and capacity of international organizations and agreements. Each unilateral action which passes a certain threshold of hurtfulness counteracts the power such devices might have against a general Hobbesian anarchy<sup>8</sup>. This, along with each of the foregoing factors, imposes far greater restrictions on U.S. policy than was the case in the 1980s. In particular, the American armed forces are constrained nearly to the point of impotence except, perhaps, in the very special circumstance of total war.

These are the circumstances that today challenge the interests of the United States and render less and less relevant the capabilities of the institutions which implement American foreign policy. This state of economic and political affairs does not seem immediately threatening because it does not offer distinct advantage to a specific rival, but it nonetheless is moving the U.S. into a position from which it can no longer hold or regain initiative. The key to reversing this movement is to be found in a clearer understanding of conflict.

#### **Section Two: Pitfalls of addressing political problems militarily**

The prevailing concept of war differentiates between the cause of conflict, which is considered "political," and the means of resolving it, which is considered "military." The two realms continue to be dealt with separately, with the closest point of approach being embodied in the ideas of attacking the opponent's "will to resist" and, more recently, his "legitimacy." Despite this edging closer to addressing the sources of conflict directly, there has yet to arise an effective replacement for the increasingly impractical method of resolving conflicts indirectly, by rendering the opponent militarily impotent.

That has become impractical for several reasons. The most obvious is that military collapse may not inspire the sought-after policy change. Also, the political bow-wave generated by the extensive effort, and widespread destruction, necessarily involved in attempting to put an opponent's armed forces *hors du combat* is likely to upset relations with third parties as well as domestic



politics. It is also less and less practical for the U.S. to come up with the military means to knock out an enemy army, navy and air force while meeting its other commitments<sup>9</sup>.

#### **Occupation may not be an option**

The threat that is posed, in the end, by attacking an opponent's military is that it will not be able to protect the members of its government – that they will either be cut off from control of the government apparatus, or they will be forcibly replaced by the victorious attackers. However, due to regional strategic considerations, coalition sensitivities, or the depth to which the U.S. is willing to become involved in occupation, such complete subjugation and replacement of the opponent's government may not be an acceptable course of action, even from the outset. This was the case in Iraq<sup>10</sup>. However, if that is not the threat implied by the attack on the opponent's military, then that attack may achieve nothing more than the destruction of some part of those forces. In terms of impact on the actual source of conflict, this alone will quite likely be ineffective.

#### **The opponent may not depend upon his armed forces**

Today there are very few governments which rely on their armed forces for day-to-day survival and continued operation. There are some which rely heavily on special "security forces" to protect the regime against sedition or riot, but such governments are few, and their "Gestapos" are not the forces that would be sent to engage an attacker. A government's center of gravity is that thing without which it could not continue in power, and in most cases that thing is not its armed forces, meaning that destruction of its armed forces may not have any impact on the government's policy. This was the case in Yugoslavia<sup>11</sup>. Of course, it is possible that the armed forces may be indispensable to the implementation of the objectionable policy. Even so, destroying the armed forces without replacing the policy or the government which held it would be, at best, a temporary solution.

#### **The rest of the world may condemn conquest**

Further, the United States relies to a greater degree than in the past upon good relations with other nations. This is partly due to economic interdependence, and also to an interest in preserving the integrity of international organizations and agreements. This limits the lengths to which the U.S. can go in conflicts before it begins to suffer from "collateral damage" to its other interests. These limits will be in terms of the severity of the attacks, their targets, the overall aim and the duration of the warfare. Long war aimed at capitulation of the opponent government by decisive attacks on the armed forces and destruction of their supporting industry and infrastructure can no longer be contemplated without also considering manifold negative side-effects in political and economic arrangements elsewhere around the globe.

#### **The American public may not accept the need**

There is also a domestic effect to be considered. Total war – a contest with the possible outcome of the complete elimination of a government – is the concept upon which American defense was structured. The possibility of total war still exists, certainly, but U.S. interests have not been served by engaging in total war since Korea. Instead, it has participated in one carefully limited war

after another, and as time has gone on, its citizens have shown less and less tolerance for the high levels of destruction that have historically been associated with, and would presumably be acceptable in, total war. The same can be said for reaction from abroad. Unless total war is practical, the casualties and damage that would be unavoidable in an attempt to definitively defeat an opponent's armed forces now pose an unacceptable political cost.

#### **The forces may not be available**

Finally, there is the practical consideration of the availability of decisive force. If the opponent's armed forces are to be put out of business, American doctrine flatly states that this is to be attempted with decisive force. However, commitments for U.S. armed forces have grown while the forces themselves have dramatically shrunk. The wear and tear on personnel is noticeable, and has resulted in large increases in personnel costs. The reduction of anticipated service life and the increased demand for replacement parts and expendables threatens to bankrupt present long-range financing schemes which are critical to readiness five-to-ten years hence<sup>12</sup>. Further reduction in force structure seems inevitable, to the point that the U.S. ability to deter North Korea will come into question if it must engage in total war elsewhere.

All of these effects demonstrate that the prevailing concept of war, upon which U.S. forces and doctrine are organized, will present complications more often than solutions under the conditions of the 21<sup>st</sup> century. It does not take adequate account of the impact of technical improvements in reach, precision and knowledge achieved since the advent of total war. War's evolution continues apace, and the looming economic and political circumstances now strongly recommend investment in a refined understanding of its current relationship to conflict, and its role in statecraft.

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<sup>1</sup> Toffler, Alvin and Heidi, *War and Anti-War*, Warner Books, New York, NY, 1995, p204-207

<sup>2</sup> *New World Coming*, Phase 1 Report, Major Themes and Implications, U.S. Commission on National Security/21<sup>st</sup> Century, Washington, DC, 1999, p6

<sup>3</sup> Mandelbaum, Michael, "Is Major War Obsolete?," *Survival*, Winter 98-99, Ed. International Institute for Strategic Studies, London, 1998, p27

<sup>4</sup> Lugar, Richard and Woolsey, James, "The New Petroleum," *Foreign Affairs*, Jan-Feb 99, Ed. Council on Foreign Relations, New York, NY 1999 p88-102

<sup>5</sup> Lueck, Sarah, "Surge in Oil Prices Unlikely to Trigger Inflation," *The Wall Street Journal*, New York, NY, 21 Nov 99

<sup>6</sup> *International Petroleum Encyclopedia* 1998, Petroleum Publishing, Tulsa, OK, 1998, p109

<sup>7</sup> "States Possessing Nuclear Weapons," U.S. Department of State Factsheet, U.S. Govt. Printing Office, Washington, DC, 1998

<sup>8</sup> *New World Coming*, p11

<sup>9</sup> *New World Coming*, loc cit.

<sup>10</sup> *After the Storm: Challenges for America's Middle East Policy*, The Washington Institute for Near East Policy, Washington, DC, 1991, p7

<sup>11</sup> Grant, Rebecca, op cit, p11

<sup>12</sup> Goure, Daniel, "The Coming Defense Budget Train Wreck," Center for Strategic and International Studies, Washington, DC, 1999

## **CHAPTER FOUR – THE NEW METHOD**

### **Section One: Defining conflict in terms of policy**

Chapter One explained that the concept of war has evolved, from something that was ignited by the failure of diplomacy, into something that was indistinguishable from diplomacy (but for its violence). It pointed out that the aim of war, under the old concept, was military victory, whereas the aim under the new concept was the same as that of diplomacy – to alter the opponent's policy. Chapter Two suggested that this fundamental change in the concept of war stems from the merging of knowledge-based, "revolutionary" struggles with mainstream "industrial" war in the last half of the 1900s. By that time, both of these schools of war had come to reflect, in their own ways, the pre-eminence – among factors that end peace, bring about war, and are key to its sustainment – of policy choices. When the two schools confronted each other in places such as Indochina, the industrial concept of war proved inadequate until its practitioners recognized the centrality of policy<sup>1</sup>. The evolved concept of war, therefore, is based on the notion that all wars have at their root a conflict between the policies held by two (or more) parties, and that those parties will employ the instruments of their national power in efforts to cause their opponent to change his policy. It defines war as the portion of those efforts which are extremely hurtful – but it makes no distinction between the aim of war and the aim of any of the other efforts. These are all understood to be designed to bring about a policy change. So, to make use of the evolved concept of war, the value of which was explored in Chapter Three, it is necessary to begin by perceiving any war-like conflict (or any conflict between nations whatsoever) in terms of the policies that each party holds, which are in collision.

### **Rejecting History's approach**

This is not easily done. Written history has clouded the issue with its tendency to classify conflicts simply as mirror-image struggles – one side wishes to impose something and the other side wishes to resist it. There are at least five classic variations: the first is that somebody has something that someone else wants, be it territory, authority to rule or tax, trading rights, or even prestige. The second variation is that somebody wants something to happen between two third parties which a second party does not want, like Germany wanting Austria to rebuke Serbia, against Russia's wishes. The shorthand for this is "going to war to preserve an alliance." The third variation centers on revenge, and the fourth is a pre-emptive attempt to put a potential rival at a disadvantage, before he develops into a peer competitor. The fifth variation is that waging war is part of the policy of the leader because he paints himself as a warrior king, and thus must conquer to legitimize himself<sup>2</sup>. Despite being a commonly-accepted way of classifying the motivations behind wars of the past, this system is not helpful when it comes to identifying policy conflicts. Even though these descriptions are often cited as the "cause" of the conflict, they actually describe the objective being sought rather than revealing anything about the policies that underlie each side's actions.

To get at the colliding policies, it is best to eschew the mirror-image explanation, and to question why the two parties find it necessary to fight. Factors which traditional history would point to as causes, like the territory or rights they seem to be fighting over, should be ignored because such factors can nearly always be sorted out by means other than war, and most often are. Therefore there is something else peculiar to the situation which results in conflict. Often, it is useful to approach this search as if attempting to arbitrate the conflict, searching for the arrangement that would permit a lasting peace between the parties. To identify that arrangement, the underlying causes of the conflict must be addressed, otherwise the peace would be temporary, at best. As a result, the colliding policies of each side are usually found, and a clear understanding of the root of the conflict is finally available. Based on that discovery, the method described in this chapter can establish an objective and a strategy for achieving it which will provide the most direct (the surest, if not the most expedient) route to peace, generally with the lowest risk and cost.

#### **An example – finding the hidden cause**

As an illustration of the difficulty of identifying the underlying policies, consider the conflict between European settlers in America and the Original Inhabitants. Traditional history explains this, rather superficially, as a conflict between two mirror-image policies that were incompatible – each side pursued exclusive use of the same territory. However, deeper examination suggests that their conflict lay between the European policy of personal ownership of parcels of land, including all that grew or lived on it or lay under it, on the one hand, and on the other the Native policy that non-tribe-members were less endowed with human rights, and that therefore killing them was a proper way to discourage their encroachment upon the tribe's traditional hunting area<sup>3</sup>. The actions resulting from these two different policies was the same – members of both sides drove out or killed interlopers from the other side. Yet despite that similarity, notice how these similar actions were not actually driven by mirror-image policies, and how their asymmetry provides the opportunity for resolving the conflict.

Given this appreciation of the conflict, the Europeans' objective might have been to convince the Natives to abandon their view of Europeans as less human than themselves. That would have made available to the Europeans the strategy of demonstrating that they were the Natives' spiritual equals, with the outcome that they would be allowed to settle in the hunting areas, provided they did not interfere with the natural occurrence of game, nor the Natives' access to it. Viewed from the Natives' side, their objective could have been to convince the Europeans to modify their concepts of trespass and poaching, with the outcome that they would retain access to vital tribal resources, and perhaps obtain allies in the constant effort to police their hunting grounds. Perhaps those strategies could have provided a solution to the conflict that was less costly and less onerous to their descendants than the approach that was ultimately used. The likelihood remains that the two sides would still have had to engage in limited combat to convince their opponents – as mentioned in Chapter One, there are often recalcitrant individuals who refuse to be convinced and must simply be

eliminated the hard way. But, because all parties never looked beyond the mirror-image level, they were limited to strategies of annihilation. Those, in turn, limited them to the military tool. Although that tool eventually enabled the Europeans to seize control of the land, it did not address the policy collision, and in the end it has only exacerbated – with charges of genocide – the conflict between the two parties, which continues to this day.

This first step of identifying the policies in collision – the “conflictual policies” – is the most esoteric, least structurable task under the new method, but it is also the most critical. Using the technique of simulating an arbitration of the conflict, this step investigates the elements of each side’s policy by systematically identifying the obstacles which prevent the two sides from sustaining harmonious relations. Once it identifies an obstacle, it posits a solution. In the example above, the obstacle was that both groups wanted the same land. The posited solution was that they might share the land. Yet with that solution, it is easy to imagine that obstacles would continue to exist – the Europeans would not feel that they were truly in possession of land to which they could not control access, and the Natives would not accept the Europeans’ impact on the abundance of game. A second set of solutions to this second set of obstacles is then posited, and the process repeated by re-asking, “What is it that would keep each side from accepting this solution?” This process – of revealing the tenets of policy on each side piecemeal by tracing the outline of what they will not accept – is continued, through a third or fourth set of solutions and obstacles, as many times as necessary until the fundamental policies – those which must be changed for any resolution to work – are at last understood.

### **Section Two: Identifying who determines policy**

Once the opponent’s conflictual policy is identified, the next step is to consider who is in a position to affect that policy. There are certain individuals on the opposing side who have it in their power to change the conflictual policy, but in many cases the search for these individuals – (and the subsequent examination of their motivations, which is the subject of the following section) – is again confused by traditional portrayals of the sources of conflict. It has long been the habit of historians to respond to the question of “Why do nations go to war?” by describing wars as struggles between two peoples – between the French and the English, for example – a clash between civilizations or societies – when they are more often struggles between governments.

Chapter Two explained how the evolution of war in the industrial nations toward total and apocalyptic forms increased the involvement and importance of the great mass of ordinary citizens. That idea created perception – very often cited in histories of WWI – that governments are driven, sometimes against the collective will of the elite, to comply with some irresistible popular will to fight<sup>4</sup>. That, in turn, led to the notion that this alleged popular will to fight was the source of the opponent’s continued resistance, and that breaking that will should be the strategic objective. Rwanda, the former Yugoslavia, and even Ireland provide a second set of evidence that the people, themselves are the source of conflictual policy. All three cases brim with stories of individuals taking it upon themselves, as a result of their own convictions, to pick up a weapon and join the fight<sup>5</sup>. In

defense of the historians, it must be admitted that there have been many cases in which it appears that an entire people is party to a war.

### **Human nature vs. History**

However, the magazine-cover depictions of such war-zone stories gloss over important facts. The foremost of these is the fact that human beings are genetically inclined toward peaceful behavior. As a prerequisite for their survival as a semi-social creature, they are normally very tolerant and will become violent only when they perceive a grave threat to their existence. (This tendency can be easily over-ridden in adolescents, and may be reduced or absent in abnormal individuals.) Humans also tend naturally to recover after a short while, by virtue of a self-stabilizing mechanism, from the emotional upset that results in violent behavior<sup>6</sup>. That begs the question of how these supposedly docile humans are motivated to engage for prolonged periods in such violent behavior, like the paroxysm currently going on in the Balkans. The writers who have posed this question to fighters, whether in Pristina, Belfast, Kigali or Grozny, all are rewarded with tales of personal loss, injustice, and a more-or-less elaborate rationalization based on the need to stop the enemy in order to preserve life, as the fighter understands life should be. In other words, the fighter has been convinced that the enemy poses a grave threat to his, and his family's, existence. His resort to violence is therefore normal and natural. However, his elaborate rationale is not.

The other fact which is often glossed over is the mechanics of the conflict. The notion of the common man as the source of conflict ignores the required organization, equipping, supplying and training of the participants. The fact that these things, just like the aforementioned motivation and inspiration of the combatants, do not simply happen by themselves and, yet, no prolonged campaign of violence is possible without them, provide strong indication that conflict springs from some source other than the general populace. These things come from somewhere. And they are delivered purposely, to create and sustain the conflict. Indeed, no matter how spontaneous or popular a movement may seem, there can be found among the supposedly amorphous mass of "the people" individuals who inspire, guide or sustain the conflict. These constitute, for the purpose of this analysis, the "elite." Wittingly or otherwise, they provide the emotional appeals, the justifications, the motivation, training and means for the struggle. They are the channel through which the conflictual policy, which has been adopted by the leadership, is transmitted to the general populace<sup>7</sup>.

### **The role of the elite**

It is true that a government can lose its legitimacy if it falls out of synch with the public's willingness to engage in or continue a war. Properly understood, that is what constrained both the British and the German governments in WWI, and the fear of that forced the U.S. out of Vietnam<sup>8</sup>. However, the conflictual policy that leads to war cannot originate with a people, because they require agitation from some external source in order to accept the necessity of conflict. That provocation can come from an opponent or rival but in the absence of such direct threats the emotional pitch needed for violence can only be created or sustained by reminders and agitation. The elite provides that



agitation by suggesting that the opponent somehow poses a deadly threat to them or their families. As a result, the strategy of eroding a country's will to fight by bombing the civilian population is uniquely counter-productive. It is not aimed at the individuals who have any effect on the conflictual policy in the first place, and in the second, it can only serve to prove to the populace that what the elite has been suggesting is actually true – the opponent does, indeed, pose a deadly threat to them. This serves to stiffen their resistance, and materially decreases any worry among their leaders that the conduct of the war might undermine their legitimacy among their citizens.

Therefore, once the conflictual policy is identified, and the search shifts to those who are responsible for it, and who might be induced to change it, it is to the elite that the investigation turns. This category can include a vast variety of individuals – anyone, in fact, who has any impact on the opinions of those whose actions or support are necessary for the conflict to continue, from the head of government to the town gossip. However, most members of this elite do not have any more opportunity to affect the policy they sustain than does the ordinary person. That is reserved to a much more restricted circle within that elite.

#### **Who is relevant? – the leadership circle**

Therefore, effort must be invested in identifying those constituting the opponent leadership with respect to the conflictual policy. That is to say, the effort focuses on those whose authority or influence causes the policy to exist – the policy's human center of gravity, as it were. In all cases this is not just one person. It is distributed among some number of people – diffused among a broad mix of elite and informal leaders, or concentrated between an autocrat and a very small group of cronies, or somewhere in between these two extremes<sup>9</sup>. The question is, "Upon whose support does this policy depend?" The answer is a list of individuals. It is these individuals whose motivations are of use.

Policy was described in Chapter One as a rationale that relates interests to actions. The making of policy is, therefore, a rational act. That is to say it is based upon an appraisal of costs, benefits and risks. That appraisal is carried out by a small group comprising the elite members most likely to pay those costs, enjoy those benefits, and confront those risks. These people socialize, correspond and do business with one another, share an interest in the policy at issue, and take into consideration each other's views and impressions on the subject. This is the "leadership circle," – it adopts and supports a policy even though it creates conflict with some third party, on the basis of a rational estimation that some advantage or benefit will accrue to its members. Only opinion within this circle will have any effect on that policy. It is these few individuals, therefore, who are the proper focus of efforts to resolve conflict.

#### **Where to look**

Regardless of whether the opponent is a state or a non-state, the search for individuals who make up the leadership circle with respect to a particular policy should find that its members include not only the obvious "leaders" who are political or military figures, but also people who provide money, as well as perhaps some others whose function is to provide legitimacy. If the opponent is

a state, the leadership circle would normally include the head of government or state and certain principal advisors, staff members (ministers and bureaucrats) and family members, plus perhaps certain party luminaries, bankers, industrialists, intellectuals, military and security forces officers, union leaders, local chiefs and officials, heads of clans, independently wealthy individuals as well as possibly traditional and religious authorities. In parliamentary countries, leading legislators, judges and other public figures, including even popular celebrities, may be on the list. The circle may contain citizens – even leaders – of other states. If the opponent is not a state there will still exist, however informally, a leadership and a circle of consensus among influential individuals which constitutes the policy's human center of gravity, although it is more likely to be small, covert, and include individuals in foreign countries.

By and large, they are the people whose support is considered by the leader to be necessary for his government to continue. Therefore in totalitarian states, the circle may be relatively small and in parliamentary states, it is likely to be somewhat larger. However, for the purpose of developing a strategy, the object of this step is not to develop a list of all people involved in, supporting, or having access to the leadership. Rather, the list must be limited to the subset of that group who are members of the leadership circle whose interests include an identifiable stake in the conflictual policy. The by-name identification of as many of these persons as possible is a prerequisite for the next step.

### **Section Three: Identifying the motivations of the leadership**

In trying to have an effect upon an international or transnational conflict, it is not worthwhile to ponder the motivations of a country, or of a people, or even of a group or a party. Such things are psychological figments in any case – symbols rather than manipulatable interests. Nor is it useful to consider the opposing government's motivation, or that of the opponent elite, because these are never homogeneous or monolithic<sup>10</sup>. Rather, motivation must always be addressed on the level of individual persons.

The motivation of formal group or governmental leadership is often expressed as an ideology with which the group identifies. However, in both formal and informal cases, the individuals who gravitate to leadership roles are usually motivated to a large degree by their personal interests, rather than ideological tenets. These might be power, prestige and perquisites of office, or they might incorporate elements of a formal ideology into the individual's self-image. Motivations – needs, preferences and fears – are critical because they are the levers upon which both diplomacy and war work. Only where it is practical for one to grant something needed by his opponent or take it away, to deliver something feared or withhold it, to satisfy a preference or, perhaps, to satisfy someone else's, instead – only there is it possible to have an effect on the opponent's thinking.

### **Deciding to go along with conflict**

Based upon their personal motivations, the various individuals who make up the policy's center of gravity will have already evaluated the potential benefits to their "side" and to them, personally, of the policy that is the source of trouble. They will have also considered the potential costs of that policy leading them into

conflict with others, and will have estimated the probabilities of those benefits and costs, concluding that it would most probably be to their advantage to pursue the conflictual policy. Those who support the policy either expect no costs or bearable costs, or expect the costs will fall on their rivals more heavily than upon themselves. Or, they may foresee such large benefits that they are willing to accept fairly heavy costs. In some cases, such as when they personally identify with some ideological tenet, they may be willing to accept any cost<sup>11</sup>.

This personal calculus of key opponents, be it based on self-interest or on more lofty concerns, is the target of all available instruments of national power: political, diplomatic, economic, military, forensic, humanitarian and expert. However, before any of these can be successful, there must be some understanding of what each individual's motivations are. This can be inferred to some degree based on knowledge of the person's role or position is. But a person's title often does not explain his support or interest in a particular policy. For that reason, a concerted effort must be made to learn as much as possible about background, either from the individual himself, or from third parties in a position to know.

#### **Discovering the basis for decision-making**

Naturally, a fair portion of useful information is of a normal, biographical nature: who and where are his spouse(es), children and other close relatives, what are his official responsibilities, his religion, his political affiliations, where are his home and his office, what books or articles has he written. But further information is needed: what are his responsibilities to his family and village, where does his money come from, what property or businesses does he own or hold interest in, what are his ambitions, who are his sponsors, clients and rivals, does his family or village have rivals and of what nature are the rivalries, does he receive patronage, bribes or other forms of payment and what does he do with it, where is his money kept, what are his phone numbers, does he use radio – all of these are essential elements of information to be able to infer motivations. Successful collection and analysis of such information for as many of the individuals in the leadership circle will provide a roadmap of avenues by which influence best can be applied to its members. That is the key to development of effective strategy.

#### **Section Four: The development of a strategy**

The term, "strategy," has been defined many ways over the years, and is often used to describe a master plan, which guides planning on a number of subordinate levels, over an extended interval<sup>12</sup>. In contrast, it is used here to mean a concept by which one expects to cause a certain change in something that is not under his control, which is necessary to produce the outcome he desires. It is the influence on something which is beyond the strategist's control that distinguishes strategy from planning. Planning deals only with resources that are under the planner's control. Resolution of a policy conflict by inducing the opponent to modify or abandon its policy is, by definition, an exercise in strategy, because the opponent's thinking is beyond one's control. However, the top-level strategy to do that is likely to be supported by subordinate strategies, like wheels within wheels, which aim to establish conditions which will combine to

change the costs and benefits of the opponent's conflictual policy from those their decision-makers expected. In a similar fashion, the top-level strategy itself plays a supporting role to a regional or global concept.

The strategy to unseat an opponent's policy logically would, therefore, have its roots in a long-standing concept of how non-conflictual relations should look, both with respect to the opponent and the rest of the region, and would have to be designed to support any over-arching strategy which might have been created to realize that concept. While there is nothing in this which should seem unfamiliar to the practitioner, it bears special mention that, under the new method, the strategy for war is perforce the same strategy that guided less hurtful measures before the war. "War strategy" and "war aims" are now, under the evolved concept of conflict, synonymous with their peacetime predecessors, and there is a seamless transition from one to the other. An implication of this is that all conflicts of policy, be they major or minor, will be addressed via a strategy which does not differentiate between peacetime tools and wartime ones.

#### **A peacetime campaign with wartime methods**

This results in a campaign that ignores the traditional boundary between peace and war, in a steadily escalating effort to inspire a realization on the part of as many members of the leadership circle as possible, that it is no longer to their advantage to stick to their old policy. Typically, such a campaign would begin with diplomatic and political tools being used to deliver simple and direct explanations of the intrinsic goodness or correctness of an alternative policy, in terms of a philosophy the opponent accepts, and the unwholesomeness of the conflictual policy. If that proves ineffective, it would move on to demonstrating the mutual advantages of an alternative policy, perhaps with the inclusion of economic, humanitarian or expert tools. Next, it would demonstrate the benefits that would accrue to the opponent, followed in turn by suggesting benefits not directly related to the alternative policy that could be enjoyed by specific members of the leadership – that is to say, bribes of one form or another. At that point, emphasis would shift to demonstrating the disadvantages of clinging to the conflictual policy, first with warnings and threats, and then with hurtful actions. Although all national instruments have a potentially coercive value, the military tool would become increasingly central in the later stages, up to the ultimately hurtful form – total war to replace the opponent leadership.

Yet, policy conflicts naturally range from the trivial to the highly provocative. Resolution of each conflict should only be pursued at a cost appropriate to its broader importance. In other words, it is not worthwhile – or morally defensible – to apply hurtful measures to resolve most conflicts<sup>13</sup>. Minor disagreements, over tariffs or the exportation of animal species for example, should be handled according to a strategy that coordinates all appropriate national instruments, but that strategy should not carry beyond fairly benign measures. But, because this method uses the same process to develop strategy for all sorts of conflicts, there must be provision for identifying when to accept failure.

#### **Knowing when to give in and what to give up**

Ideally, the importance of each conflict should be weighed in the context of

regional and global guidelines. Well prior to any war, they should be identified by combing relations with all states and known non-state actors in each region for policy conflicts. These should be compared on the basis of a coherent policy toward each region, that is linked to its counterparts for other regions by a global policy or set of principles. This provides a rational basis for determining how far to go to resolve a particular policy conflict, and for estimating the costs and potential impact of the envisioned campaign upon regional and global policy. These are best understood at the outset.

Strategy development must also consider the costs to the opponent of abandoning his policy. These are quite often seen as prohibitive – a loss of legitimacy for the government, loss of position and perhaps arrest for the leadership, loss of honor for the country, violation of sovereignty, a long list of sacrifices for naught, etc. As a result, while members of the opposing leadership circle might become convinced that they have over-estimated the benefits that their conflictual policy will bring, they may remain strongly averse to abandoning it<sup>14</sup>. To counteract this, a deliberate effort must be made to create benefits associated with abandoning the policy, and to make them both obvious and alluring. Therefore, the strategy must address alternatives to the opponent's policy.

When considering alternatives to an opponent's conflictual policy, it is tempting to propose those which solve one's own problems more effectively than those of the opponent. However, it is helpful to keep in mind that the success of one's own strategy for overthrowing the opponent's policy depends upon how palatable the opponent finds the alternative. Therefore it may require considerable sacrifice, in terms of one's own policy. In proper perspective, this sacrifice has to be weighed against the costs of a prolonged conflict, which would result if the opponent found it impossible to give up his original policy. The identification of potential replacements for the opponent's policy is more likely to be useful if it produces a range of several alternatives, rather than a single candidate. If the early efforts to unseat the conflictual policy are not successful, this list must be re-visited, particularly as hurtful measures are brought into play, because the opponent's flexibility may decrease as they begin to make sacrifices.

For all of the foregoing reasons, the entire process from beginning to end is best developed as one continuous strategy, before even the earliest efforts to change minds are begun. Of course, this is not always possible because some conflicts do not become apparent until some unforeseen development makes them obvious, and then demands a quick response. Iraq's invasion of Kuwait is a case in point<sup>15</sup>. Nonetheless, crisis management translates most successfully into longer-term resolution when it is approached as an attempt to resolve policy conflict, based upon the best-available appreciation of the motivations of the relevant opponents. Even when the first instrument to be applied is the military, this should only be attempted as part of a strategy anchored to the broader foreign relations framework and developed with input from experts in all of the other instruments. Provided that adequate intelligence is available, and that the framework already exists, such an approach to crises is entirely feasible.

### **Coordinating seven different instruments**

Whether it is assembled in haste or at leisure, the strategy must coordinate the use of all instruments of national power, so the efforts by one instrument complement and reinforce the effects of others, in such a way as to produce a tempo of recurring impacts on the opponent's thinking. To achieve this, a statement of guidance must be created which translates the existing conditions and the regional or global policy framework into a desired outcome, or a range of acceptable outcomes. Once this is prepared, experts in the employment of each of the seven instruments of national power can be invited to use that guidance to suggest a strategy by which their instrument alone might bring about the desired outcome. The resulting seven strategy proposals then provide a basis for comparison and combination, allowing one to be designated as the "main effort." The remaining six would then be re-worked to support the main effort, and coordinated into a single campaign schedule.

Should the conflict threaten sufficiently grave consequences that the strategy extends into hurtful measures, those will be designed to discourage members of the opposing leadership circle by demonstrating that their risk-benefit calculations were in error, and to discredit, render powerless or to eliminate those among them who are unlikely to be discouraged. These outcomes may be realized as the result of many different kinds of actions, some of which are carried out by the military instrument, and others that belong to the diplomatic, political, forensic and economic realms. Regardless of the tool involved, for the purpose of selecting among them to best suit the existing situation, it is helpful to consider them to fall into four general categories: measures against the implementation of the opponent's policy, measures against the activities that support that implementation, measures against the general effectiveness of the leadership, and measures against members the leadership, themselves. Some examples follow.

### **Countering the opponent's moves**

Measures against the implementation of the opponent's policy are particularly attractive when that policy comes as a surprise or, as in the case of an invasion, when the policy or its effect clearly will become far more difficult to reverse as its implementation progresses. In such cases, although positive inducements could play an important role in getting the opponent to abandon his policy, hurtful measures against the opponent's activities directly related to that policy may be doubly effective when incorporated early in the strategy. These could involve attacks, condemnation and counter-moves against such opponent activities as deployments of armed forces, technical experts or other government agents; against facilities supporting government repression or terror such as security forces, training camps, customs or immigration checkpoints and border patrols; against hostile manipulation of market and financial forces such as product dumping, price hikes, protectionist barriers and attempts to devalue currency; against weapon development or export facilities; and against the opponent's political pronouncements and diplomatic maneuvers. By interfering with implementation, such measures immediately begin to divide the opponent circle into those who promoted the idea and those who simply accepted it.



However, in cases where the implementation of the policy is less precipitous or provocative than an invasion, focusing hurtful measures directly on the implementation itself may not be the most effective choice, and could even be counter-productive in some cases, as it tends to aim at an opponent's "hardest" targets. In such cases, the other three categories offer the most likely avenues.

#### **Reducing the opponent's confidence**

Measures against the activities that support the implementation of the conflictual policy reach deeper into the organization and economy that give the opponent his ability to undertake the activities described above. These are often targets that offer double or triple value because they may be activities in which the members of the leadership circle are personally involved and from which they profit. Thus, such measures can, in some cases, have a very direct impact on the perceptions and personal calculus of key individuals, working squarely against the conflictual policy's center of gravity. These measures could consist of attacks designed to degrade government offices, collection of government revenue of all sorts, parastatal industries, the export of goods, the production of supplies or equipment used in the implementation of the conflictual policy, the receipt of military materiel and the opponent's control of border regions, collection of taxes, and enforcement of law. They could also include efforts to disrupt the opponent's commercial airlines and shipping, travel of his diplomats beyond their areas of accreditation, his tourism industry, and his general government financial or monetary arrangements. Economic attack against the value of his currency in foreign markets and the competitiveness of his exports may also be useful. However, care must be exercised when selecting from this category. Not all of these targets will have a strong link to the conflictual policy in any particular conflict, and in some instances, certain ones will have no link at all. The selection must be based upon their expected impact upon the personal interests of members of the leadership circle in order for them to have the most direct effect. For example, if the head of a particular parastatal industry is an important supporter of the conflictual policy and his influence derives from his position or from money he skims from his industry, destruction of that industry would be of higher value than destruction of some other industry whose head was not a key player, even though its product might seem more militarily relevant.

#### **Isolating the opposing leadership**

Measures against the general effectiveness of the leadership are designed, in general, to undermine the leadership circle's sense of security and privilege, causing them to consider the possibility that clinging to their policy will ultimately cost them their special position. In terms of psychological effect, they are more directly aimed at regime officials than the previous category, while still not targeting them specifically. Damage is also more limited to regime-related facilities and capabilities, rather than having the general, nation-wide effect of some of the foregoing measures. Examples of these measures would include physical attacks against the regime's special police or party enforcement wing, and against regime or party owned or operated facilities, vehicle fleets and offices, particularly those engaged in revenue collection; cyber raids on regime or

party bank accounts and financial records; electronic and physical interference with regime broadcasts or operational communications; restriction of foreign travel of regime members; disruption or destruction of special institutes or schools which provide ideological legitimacy or perform covert roles in support of the regime; and – when they can be identified – physical attacks against programs, projects and gifts to individuals or communities which were intended by the leadership to enhance the loyalty of their supporters, including civil works. Such measures tend to involve limited damage, require smaller effort and risk to carry out, and their physical results tend to be minor or temporary, having little “military” effect and easily compensated for by the opponent. Their real value is their effect on the psychology of the leadership circle and its individual members, as it delivers the unnerving effect of their continued resistance quite close to home – right on the system that they depend upon. Because their value is primarily psychological, their effect is considerably multiplied if these measures are sequenced and timed to give the impression of an ever-accelerating unraveling of the regime’s instruments of influence and control.

#### **Bringing the war to the front door**

Measures against members of the leadership circle, themselves, can spark a debate regarding the propriety of targeting leaders – particularly heads of state – instead of forces and resources. That debate is given full treatment elsewhere, and will not be pursued in this paper. Suffice it to say that there is no point in eliminating a person who will inevitably be immediately replaced by his regime with someone else with the same convictions and agenda. More importantly, for the purpose of the present discussion, there is a wide range of measures against individuals which do not involve killing them. The desired outcome, after all, is that the conflictual policy’s center of gravity be destroyed by changing minds. While it is necessary, at times, to “change” an opinion by eliminating the person who holds it, there is no guarantee that his replacement will hold a different opinion. Therefore there is less risk in measures that aim to convince circle members that their policy will inflict greater costs and confer fewer benefits upon them, personally, than in measures that simply aim at killing them. Such measures consist of physical attacks on their personal property, disruption of their utility services, communications, mobility and their sleep. They include cyber, economic or physical attacks on their wealth – their accounting system and account balances, including overseas accounts – as well as on their means of acquiring it, both overt means and covert ones such as black-market, smuggling, skimming and rackets. Political or diplomatic damage to the individuals’ reputations can also be highly effective, as can any measures that reduce their ability to deliver on promises of patronage. Measures that raise the individuals’ concern for their personal safety or that of their family members are also of value, including attacks against protective details. The forensic instrument can be used to instill fear of prosecution for corruption or war crimes. In contrast to the attacks against the general effectiveness of the leadership, measures against the individual members do not gain significantly from appearing to be building toward a crescendo. Indeed, since the aim is not to kill the person, such a rising tempo would be counterproductive. These measures

can be, in some cases, most effective when they are delivered at random intervals over a prolonged period, which tends to reinforce insecurity and foster uncertainty.

The foregoing lists of possible targets for hurtful measures are not exhaustive, nor are they intended as a shopping list from which targets should be selected. They are intended to illustrate how, if hurtful measures are expected to be necessary, several different instruments of national power might play a role in attacking a particular center of gravity. In any real strategy development, target selection should be based on the value of the target *vis-à-vis* the center of gravity, the practicality of striking it given the means available, balanced against what is required or prohibited by the immediate circumstances. All should be guided by a clear definition of the opponent's policy, and aimed as directly as possible against that policy. There are, however, some special situations in which the center of gravity of that policy is not the consensus of the leadership.

#### **Special case – leaders who aren't in control**

As previously mentioned, there are circumstances under which a powerful autocrat can refuse to be swayed by doubt and dissent within his leadership circle, and may even use secret police to suppress such expressions. In such cases, the center of gravity of the conflictual policy ceases to be the consensus of the leadership circle, and shifts to the secret police and other parts of the autocrat's security apparatus. Note that such an assessment requires that dissent within the circle is present and strong enough to unseat the policy, if only the constraint of the secret police could be removed. The security apparatus can be an extremely "hard" target due to its low profile and its wide dispersal among other organizations. Also, it is essentially immune to measures other than physical attack. The people best positioned to plan and carry out attacks against the apparatus are the very ones policed by it, and while the most effective strategy might incorporate measures to promote and assist such attacks, there is a strong temptation to select alternatively the autocrat, himself, as the main target. However, aiming to kill a head of government or state is widely considered an act of war<sup>16</sup>, and therefore can impose significant limitations on the flexibility which is the primary advantage inherent in this method.

#### **Section Five: Execution**

Flexibility, in this context, refers to the ability to act against an opponent – that is, to assemble whatever consensus is required, both domestically and internationally, so the action does not bring unacceptable political cost – even when the opponent refrains from conduct that exceeds the threshold of provocation. That threshold represents a redline beyond which smaller countries face a sharp increase in the risk of bringing a great power intervention down upon their heads. The growing limitations to great power freedom of action, described in Chapter Three, have effectively raised this redline. Certain countries are becoming adept at strategies to undermine U.S. policy and impose their own by using this new method to "tailor" their operations as close as possible to the threshold of provocation without exceeding it too far or for too long<sup>17</sup>. They aim to use as many of their instruments of power as possible, as forcefully – in many cases, as hurtfully – as possible, without causing a

consensus for retaliation against them to crystalize, either within the great power's domestic politics, or among the international community. This same new method offers the great powers the flexibility to act against such opponents by providing techniques which are less demanding in terms of the consensus required for their use. But the threshold works both ways, meaning a great power using this method must not choose measures that exceed the redline, and provoke serious repercussions in international relations. A concerted or refined assassination attempt against an opponent head of government would very likely do just that. The key to avoid such problems is in the design of the execution phase of the campaign.

#### **Total or "tailored" war?**

In short, the execution of a new method campaign is determined to a large degree by the prevailing conditions. If the opponent is engaged in an invasion of a neighbor or some other violent and precipitous measure, execution can approximate the sequence and tempo traditionally associated with total war, with large scale deployments of the military instrument early on. If, on the other hand, the opponent is using a tailored approach to skirt the threshold, applying pressure to a neighbor or to U.S. interests by issuing threatening press statements one day, announcing an inimical trade policy the next, and choreographing a minor military "incident" the following week, then total war would not be an appropriate response. Yet a countervailing tailored campaign could prove acceptable and effective.

The critical characteristic is that a new method campaign, regardless of its form, begins with a single strategy that is elaborated into a complete campaign, from start to finish, to unseat the opponent's conflictual policy by exerting pressure on identified individuals. Therefore, it is guided by a prescribed order and timing of events to achieve that effect, rather than by simple reaction to opponent initiatives. Diplomatic overtures, news releases, fiscal and trade decisions, foreign aid deliveries, and so on, will all play their part. In a "tailored" conflict, this comes in a slow escalation that is played out against a background of general peace, but which nonetheless eventually includes ever-more-frequent hurtful measures as well.

#### **A "living" strategy for a long campaign**

This campaign is adjusted as the conflict develops and the opponent adapts, by virtue of constant updating of estimates of the opponent's motivations, intentions, strategy and center of gravity. These adjustments may result in a different instrument being designated as the main effort, and re-coordination of the campaign. The constant review and adjustment of the campaign also provides room for the inevitable mistakes in interpreting the limited information on the opponent, by allowing for orderly corrections. A sophisticated opponent will, of course, be following a similar course. However, the major challenges of the new method are not in the tactics of adaptation, but rather consist of being able to identify the motivations of the leadership circle members, and being able to manipulate those. Although it currently lacks the method to counter "tailored" campaigns, the U.S. could dominate in both areas due to its advantages in intelligence and resources, bringing to bear its greater knowledge, reach and

precision to turn the tables in what is now a largely one-sided contest.

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<sup>1</sup> Porch, Douglas, "Bugeaud, Gallieni, Lyautey: The Development of French Colonial Warfare," *The Makers of Modern Strategy*, Ed. Paret, op cit, p405

<sup>2</sup> Keegan, op cit, p257

<sup>3</sup> Rachlis, Eugene and Ewers, John, *Indians of the Plains*, American Heritage, New York, 1960, p84

<sup>4</sup> Kagan, Donald, *On The Origins of War and the Preservation of Peace*, Doubleday, New York, NY, 1995, p179-185

<sup>5</sup> Prunier, Gerald, *The Rwanda Crisis: History of a Genocide*, Columbia University Press, New York, NY, 1995, p102

<sup>6</sup> McLane, Craig, "Missions and Means for Peacekeeping," *Managing the Peace Offensive*, AFCEA Europe, Brussels, Belgium, 1996, p1-12

<sup>7</sup> *ibid*, p17

<sup>8</sup> Summers, Harry, *On Strategy: A Critical Analysis of the Vietnam War*, Dell Publishing, New York, NY, 1984, p22

<sup>9</sup> Kagan, op cit, p57

<sup>10</sup> *ibid*, p203

<sup>11</sup> van Creveld, op cit, p63

<sup>12</sup> Webster's Ninth New Collegiate Dictionary, Merriam-Webster, Springfield, MA, 1987

<sup>13</sup> Stoessinger, John, *Why Nations Go to War*, St. Martin's Press, New York, NY, 1990, p30

<sup>14</sup> Kagan, op cit, p453

<sup>15</sup> Baram, Amatzia, *Building Toward Crisis: Saddam Husayn's Strategy for Survival*, The Washington Institute for Near East Policy, Washington, DC, 1998, p68

<sup>16</sup> Keegan, op cit, p103

<sup>17</sup> White, Paul K., *Crises After the Storm: An Appraisal of U.S. Air Operations in Iraq*, The Washington Institute for Near East Policy, Washington, DC, 1999, p31

## **CHAPTER FIVE – CASE STUDY: IRAQ**

As mentioned earlier, a major reason for the evolution from the total or apocalyptic war of the 1900s to the policy-centered model of conflict in this century is the un-shackling of small, regional powers following the Cold War. The new concept, by rationalizing the conduct of “tailored” war, offers these less-wealthy countries – particularly those which have highly-centralized governments – some important advantages over the great powers. This is mainly due to the agility required to properly adapt and re-coordinate all the different instruments of national power during the execution of tailored campaigns. Compared to the time required for reaching consensus and coordinating the ponderous bureaucracy that is typical of large pluralist governments – as well as the great strain on any consensus among a comparatively large number of individuals – authoritarian or totalitarian regimes have it easy. Decision-making and coordination are greatly simplified, particularly if the entire effort is conceived and directed by a single, supreme leader.

As demonstrated by both Saddam Husayn and Slobodan Milosevic, application of a big democracy’s traditional strategy – shaped by the concept of total war – against an authoritarian regime’s tailored resistance can initially produce the illusion of success. But, in the end, the great power is frustrated, out-maneuvered, out-last-ed and its leaders are at odds with one another regarding the justification for further intervention<sup>1</sup>. While the need to confront this sort of challenge from authoritarians can arise almost anywhere around the globe, it is an imperative in the case of the Near East – a region where highly-centralized governments are the norm, and where the U.S. has important interests in the oil trade and the safety of Israel<sup>2</sup>. In fact the most compelling reason for the United States to invest in the new form of war is because it offers the only effective response to tailored challenges to its vital interests in this critical region. The prolonged conflict with Iraq, for which no satisfactory resolution seems imminent, is a case in point. This chapter illustrates how the U.S. might use the new method to tailor a favorable outcome.

### **Section One: Historical context**

The area now occupied by Iraq has been home to many civilizations and empires since the earliest times<sup>3</sup>, but the historical context of the present conflict begins roughly with the end of the Ottoman Empire, when Britain assumed the role of protector. At that point, the area was little changed from biblical times, home to a fractious, mixed population of Persians, Kurds and Arabs, the latter being religiously divided between Sunni and Shi’a Islam<sup>4</sup>. These groups were further sub-divided, into town-dwellers and rural people. By the end of the protectorate, Britain had created the country of Iraq as a constitutional monarchy, with an Arab king, a parliament, a council of ministers and a Prime Minister. It also bound Iraq to itself by a treaty that gave its forces free access to Iraqi territory and required British approval of Iraqi foreign policy<sup>5</sup>.

#### **The Monarchy**

The elite of the new-born country consisted of the king and his retinue,



many of whom hailed from other parts of the Ottoman empire, the ministers and the members of parliament from whose ranks they were chosen, a few wealthy merchants, influential shaykhs, Shi'a religious leaders, and a handful of intellectuals or political ideologues. A very large percentage of these individuals were active or former military officers, owing to the fact that military service in the Ottoman empire had been an Arab's best ticket to higher education and a profession<sup>6</sup>. Due to the artificiality of this elite – reflecting the artificiality of the country, itself – no part of it was well-based in the general population. Aside from the Shi'i, their legitimacy was almost entirely derived from the British. Indeed, among both the elite and the common people, few could identify with the concept of being "Iraqi."

The issues that absorbed the elite's attention were essentially two: delaying or hastening the end of the U.K. influence in their country, and the passage of laws that would determine the membership of the elite after Britain's departure. These laws ultimately had the effect of largely disenfranchising the Shi'i and adding impetus to Kurdish separatism, leaving the Sunni Arabs as the predominant members of the elite. The argument over the path to follow, once the British were gone, developed into a debate between pan-Arabism, which would unite the territory with other formerly-Ottoman regions that were inhabited chiefly by Arabs, and nationalism, which would develop Iraq as an independent state with a uniquely Iraqi elite<sup>7</sup>. Because so many of the elite were members of, or had strong connections to, the military, the armed forces became highly politicized – albeit containing proponents of nearly every cause and persuasion – and repeatedly played a direct role in the course of events.

#### **The disappearance of an Iraqi elite**

For decades these issues were hashed out exclusively among the elite by way of various re-arrangements of the Council of Ministers and a series of rigged elections. The long influence of Britain and monopoly of power by its favored, but largely artificial elite generated an enduring resentment of foreign influence in Iraqi and Arab affairs, which became the uniting theme of the increasingly nationalistic opposition. The monarchy went into eclipse at one point, was restored, and then definitively ended, along with British influence, by the murder in a nationalistic military coup of the third king and his family in 1958. The parliament and Council of Ministers, while never approaching their intended role as representative institutions, continued under three successive governments dominated by military strong men. These governments found them to be useful foils for managing dissent among the remaining elite – those which had not been dependent upon the monarchy or the British for their influence – while they swung Iraq between alternately between nationalism, pan-Arabism and even communism<sup>8</sup>. Somewhat more attention was paid than during the monarchy to the connection between the common people living in Iraq and the concerns of the government, but on the whole the elite – now more and more military – remained estranged from the average citizen. In 1968 the ostensibly-democratic institutions were abolished after a fourth military coup installed the Ba'th party, which declared a socialist revolution and replaced them with its own party structure.

### **Ba'thism and the shift to regime preservation**

Ba'thism was not a popular movement, with at most a few thousand members when it took power. However, it was very well organized with experienced revolutionaries who recognized in the machinations of the "elected" elite a threat to their grasp on power. The Ba'thi established a Revolutionary Command Council, comprised of party leaders, to direct the country's policy, which would be implemented by a President. This Council was responsible to the party's own supreme body – the "Regional Command" – thus being answerable to the Iraqi people, to the extent that they chose to become full members of the Ba'th party<sup>9</sup>. All other political movements were outlawed. Party ideology played an important role in government efforts to upgrade the living conditions of ordinary Iraqis, giving them for the first time some substantial reasons to begin to think of themselves as such. However, many such efforts also constituted significant reinforcement of Ba'th security and control. A program of nationalization improved the general distribution of oil revenues among the population, while simultaneously eliminating most of the elite whose importance stemmed from position in industry or commerce. Land reform reduced the repressive effects of absentee ownership of most arable land and sharecropping, while also eliminating the political power of landlords and traditional shaykhs. Effectively, that left Iraq with only two popularly-based elite groups – the Shi'a social/religious hierarchy and the Kurdish nationalist parties. Because both groups were disenfranchised under the Ba'th, their leaders were either forced to take oaths of political non-participation or were periodically attacked by the regime.

Security also played an important role in foreign policy, because the Shi'i remained, as a group, more sympathetic to Shi'a Iran than to the secular government in Baghdad. The Kurds, whose continued separatism had led to open war with Baghdad during the monarchy and since, also turned to Iran for sponsorship. The Persian element of the population, by then, had largely fled or been deported eastward, leaving the Ba'th with its strongest support among Sunni Arabs, animosity toward Iran, and its main hope of extending its influence to the Kurds and the Shi'i being its social-economic programs and its proclamation of leadership of the Arab world against Israel<sup>10</sup>. However, this hope was imperiled by its wars against Israel turning out to be a series of disasters and its social-economic programs being undercut by its own decision to nationalize oil production, its unfriendliness toward the capitalist West, and low oil prices. By the end of the 1970s, the Ba'th government had turned more toward security and away from social progress.

### **Saddam Husayn**

Saddam Husayn became involved with the Ba'th in his teens and was an Ba'thi assassin by 1959<sup>11</sup>. In 1968 he was well established as a security expert and enforcer when he was elevated to second in command by the then-President Hasan al-Bakr, a fellow Tikriti and family member. In 1979 he succeeded to the Presidency, having spent the previous decade purging his enemies both inside and outside the party and gathering control of the security apparatus and party decision-making into his own hand. His control of the party and the government

since that time appears to have been absolute and politically uncontested. However, there have been several coup and assassination attempts against him, which he has thoroughly crushed<sup>12</sup>.

His personal emphasis on maintaining the security of his regime has created a police state. Outside the party/government, the special interests that normally arise from financial, religious or political interests have been ruthlessly suppressed to the point that, with the sole exception of the armed forces, no overt elite exists<sup>13</sup>. An elaborate system of secret police watches over all aspects of government to ensure no potential rival to Saddam arises, and this surveillance is extended deep into civil life by the Ba'th party. Any possible competition is carefully investigated and destroyed<sup>14</sup>. Externally, he has compensated for economic inability to use social progress to enlist popular support by attempting to militarily seize territory of Iran and Kuwait, and also conducted war against the Kurdish nationalists on several occasions. His foreign policy seems largely to be driven by domestic expediency, in that he appears willing to do whatever he thinks he can to his neighbors, regardless of international conventions or law, if it should appear necessary to ensure his continued rule<sup>15</sup>. Along those lines he is known to have had a robust program for development of weapons of mass destruction, ballistic missiles and "superguns," and to have used chemical weapons against civilians<sup>16</sup>.

### **Section Two: Identifying policy conflict**

Nonetheless, until his invasion of Kuwait, the United States nominally supported Saddam's regime. Since 1991, it has reversed that stance, supporting United Nations economic sanctions designed to either undermine the regime's security or disable its weapons programs. The U.S. also has helped Kurds resist Saddam's repression and, on a bi-lateral basis with Britain, denies the Iraqi military the use of most of its airspace and many roads. U.S. officials have stated on many occasions their interest in seeing Saddam removed from office<sup>17</sup>.

Following the method detailed in Chapter Four, the most fundamental level at which American and Iraqi policy collide can be identified. On the one hand, it is Saddam's policy that he should not suffer any constraint on his efforts to remain in power, even if these should extend to invasion of other countries, use of ballistic missiles and weapons of mass destruction, and attempts to assassinate a U.S. president. On the other hand, it is U.S. policy that the flow of oil from Saudi Arabia or Kuwait should not be permitted to fall under the control of a regime which might not base its export policy on a rational, cooperative approach to market forces. Further, the U.S. holds that control of weapons of mass destruction – nuclear weapons in particular – should be restricted to parties that are subject to rational deterrence<sup>18</sup>. The U.S. perception is that it is highly likely that Saddam Husayn will conclude that remaining in power requires him to seize Kuwait and possibly other Arab countries, to destroy Israel and Iran, and to take revenge on the governments that arrayed against him in the Gulf War. The U.S. views this as irrational and, thus, unacceptably at odds with its policy.

### **Does any common ground exist?**

It is worth noting that U.S. policy easily accommodates the use by other

countries of armed force when sufficient provocation is present, and also accepts the possession of nuclear weapons, even by countries hostile to the United States, so long as there is little chance that they will be used offensively because of fear of retaliation. The U.S. did not react forcefully to Saddam's attack against Iran, which it saw as being provoked by Iran's call for a Shi'a uprising in Iraq and support for Kurdish insurgents<sup>19</sup>. It also did not react forcefully to Saddam's nuclear weapons program as long as it perceived him as rational.

This suggests that there is a broad area where the policies of the two countries do not have to conflict. The collision stems entirely from American fear regarding Saddam's rationality and the consequent desire for some constraint on the Iraqi presidency. This raises the possibility that the U.S. could revise its estimate of Saddam's rationality, considering that he may have perceived Kuwait's independence much as China views that of Taiwan. There is, after all, a long-standing and well-established school of thought in Iraqi nationalist circles that Kuwait is properly part of Iraq because it was administered as such for a time by the Ottomans. Saddam also may have viewed Kuwait's oil policy in 1989 as a deliberate and highly destabilizing attack on Iraq's economy, which seriously shook his regime. The U.S. could note further that Iraq's development of weapons of mass destruction simply parallels that of its arch-rival, Iran. This perspective could support a more positive assessment of Saddam Husayn's rationality, which presents one way to eliminate the current conflict.

#### **Whose policy to accommodate?**

However, this paper will proceed on the assumption that Washington will not find such an assessment credible, and therefore what the U.S. is actually seeking is a resolution of its conflict, not with Saddam's policy, but with that of an Iraq minus Saddam. That is to say, the challenge is to imagine what the internal politics of Iraq would look like if not for the regime's repression, and to then think of the conflict in terms of a collision of U.S. policy with that of this "would-be elite". This is necessary to identify the conditions that will be required for a post-Saddam peace and, more importantly, it is also a prerequisite for recognizing how the regime may be overcome, what groups might play what role, and where to look for individuals whose views on their conflictual policy the U.S. might influence. But this elite has been suppressed for so long, its makeup must be estimated before its policy can be addressed. Unfortunately, there is no overt expression of elite interests in Iraq – an absence which might be overcome by intelligence collection efforts, but one which, for the purposes of this paper, necessitates supposition based on history and authoritative open sources.

#### **Section Three: The search for an elite**

Today's Iraq presents a more monolithic, authoritarian regime than that of Nazi Germany or even the Soviet Union. While Hitler enjoyed a similar singular position of authority and a pervasive security apparatus, he was dependent upon a number of industrialists, bankers, military officers and party technocrats to keep the country running and to feed his war machine<sup>20</sup>. These were Germany's elite – a narrow, constrained elite, but an elite nonetheless. While the Soviet Union did not have to contend with private enterprise, its sheer bulk gave rise to a powerful bureaucracy, special interests within the party itself, and "power

ministries" which enjoyed considerable influence, not to mention the Red Army and the Committee for State Security. These important divisions also constituted an elite. But, in Saddam Husayn's Iraq, there are no counterparts. The administration of the country and the economy is performed by faceless technocrats who are replaced regularly<sup>21</sup>. Important posts are entrusted to highly-loyal long-term Ba'thi or members of Saddam's family. Regardless of pedigree, no administrator is apparently allowed to express an opinion contrary to that of the President, nor are they permitted to assume any public celebrity, generally remaining anonymous and interchangeable.

This is a critical issue because, as described in Chapter Four, conflict is understood by devining its roots in a collision of policy, and such collisions are resolved by acting upon the elite. The definition of an elite, expressed earlier, includes those persons with whom the leader socializes, consults, and whose opinions he takes into consideration. There are certainly some individuals that meet this definition around Saddam but, while he uses their advice and services to run his regime or their loyalty to give it a fig leaf of legitimacy, he in no way depends upon their acceptance, cooperation or support. Therefore, they are merely Saddam's coterie, and do not constitute Iraq's elite.

#### **Looking to history**

Considering the historical sketch above, and discarding those who owed their influence to the British, it appears likely that Iraq's elite will be found among the officer corps of the armed forces, Shi'a academics and clergy, Sunni technocrats and their elders, the two main Kurdish factions, students, expatriates, and perhaps among professional associations of engineers, educators and lawyers<sup>22</sup>. These are the surviving groups that repeatedly played active roles in Iraq's government prior to the Ba'th police state, or that have become sufficiently numerous and organized in the years since that they might be expected to assume a role if conditions permitted. On the surface, these groups have widely disparate interests. To find those who are most likely to possess motivations which could be acted upon to support U.S. policy to the detriment of that of Saddam, it is necessary to do some ranking.

The officer corps has historically been the group most likely to take action against a ruler, and they are accordingly the best policed, making them less than ideal candidates. Nor are they philosophically inclined toward limitations on a leader's prerogative. The Shi'i could well appreciate the value of limiting a secular ruler's authority, and the access provided via their channels to Iran make them fairly good candidates. The same goes for the Kurds. Sunni technocrats are not disposed to activism and would see little advantage in a shift toward a more pluralist system from the current Sunni-dominated regime. Students and professional associations could play an important role in providing a supportive atmosphere for a policy change, but are unlikely to be directly instrumental due to their inability to become operational in such a non-permissive environment<sup>23</sup>.

#### **A warning to remember**

Regarding the impact of expatriates, there is an important lesson in history. Ever since the long domination by the British and their exclusionary, repressive, artificial elite, the one thing that nearly all Iraqi political figures have

agreed upon is that the affairs of their country should remain free of foreign influence<sup>24</sup>. Saddam uses this theme to unify his country against the United States and the U.N. sanctions. The potential of expatriates to influence policy is inversely related to the stain of foreign sponsorship that they bring with them. For this reason, they are not all good candidates. By the same reasoning, all U.S. strategy must consider that long term interference by any foreign power with domestic conditions in Iraq is likely to be viewed by most Iraqis as justification for strong counteraction by a "heroic" Iraqi leadership.

So, the elite which seems to have the greatest relevance to the policy at issue will emerge from the Kurdish leaders and Shi'a intellectuals and clergy at the outset. At later stages the "friendlies" could possibly include the officer corps, students and professional associations. This diverse group shares little common ground except, perhaps, an interest in rebuilding the economy. Their policy could be described as accommodating the regime in general, (albeit under varying degrees of duress), and in particular supporting its desire to rid Iraq of foreign interference and to restore prosperity.

#### **Shared interests**

Fortunately, economic recovery of Iraq is congruent with U.S. interests. The U.S. goal – greater constraint on Iraq's leaders – could be served by the notion of subjecting the president to some form of limitation on his prerogative, making him somewhat more answerable to the various groups that make up the population. This notion would certainly appeal to Kurds and Shi'i, as a result of their long history of repression at the hands of various Sunni governments. In principle, at least, it should be possible to find elite figures among these groups whose personal interests could be used inspire their support for this solution, particularly if rapid economic rehabilitation was included.

These same ideas could be expected to appeal to the professionals, the students and most expatriates, though with the most attractive feature being economic rehabilitation, and the notion of constraint being a secondary issue. This group is likely to respond more positively than Kurds or Shi'i to the general concept of a strong Iraq, free from outside influence. This is another concept which is congruent with U.S. interests, but would have to be expressed with care. However, the critical, "swing" support will not come from these groups. Their influence will not become important unless some support is first generated within the officer corps.

#### **Key support, at a price**

The military represents a special obstacle. The Kurds and the Shi'i are not in a position, by themselves, to impose a constitutional change on the Iraqi government, even if Saddam were removed from the picture. The broader support needed to effect that change cannot rise without military acquiescence, at least. Yet, the military is overwhelmingly Sunni – thus suspicious of Kurds and Shi'i – and periodically purged of any suspected of dissatisfaction with the regime. The theme of constraint on the leadership would likely find little sympathy. However, a strong Iraq, free of outside influence could play very well as would, though perhaps to a lesser degree, economic rehabilitation<sup>25</sup>. In particular, the possibility of retaining a large army and a nuclear weapons



program will have very high value in military circles. Interestingly, even these things can be congruent with U.S. interests, provided that Iraq's leaders are more likely in the future to be constrained to rational behavior. Thus, there is a key to overcoming the military obstacle and establishing the broad support for a modification of Iraq's policy, that resolves its collision with that of the United States. To exploit this key, the U.S. would have to accept some modification of its own policy, which now focuses heavily on limitations to Iraq's conventional forces and elimination of its weapons of mass destruction<sup>26</sup>.

The result of this analysis is an understanding of both who the players may be and where the fundamental conflict between their policy and that of the U.S. may actually lie. With the benefit of classified information from sensitive sources, further analysis could build upon this to produce a list of names of likely "would-be" elite members among the Kurds, the Shi'i, the military and so on. Each name could then be accompanied by such information as can be obtained about that individual's interests, with an eye toward identifying ways that the United States might influence his thinking by reward or punishment. It is on the basis of such lists that strategy can best be formulated. In the absence of such information, this paper will proceed with an illustrative strategy development.

#### **Section Four: Strategy development**

As explained in Chapter Four, a strategy attempts to precipitate an event or action by a second or third party in order to produce a desired outcome. The desired outcome in this case is an end to fear of irrational, aggressive behavior by Saddam Husayn (or some successor). The condition that U.S. instruments must seek to establish is the realization, in the judgment of the suppressed elite, that in order for Iraq to economically prosper, to free itself from foreign interference, and to have a strong government and nuclear-capable military, they must impose some form of constraint on their presidency, even at the cost of deposing Saddam Husayn.

That cost is bound to be considerable, due to the security apparatus that protects his regime. Iraq clearly fits the special case, also mentioned in Chapter Four, where the center of gravity shifts from the elite to the security apparatus which is suppressing them. However, that shift occurs only after there is sufficient dissent in the leadership circle to unseat the conflictual policy. At present, that condition cannot be said to exist. Therefore, the U.S. strategy must work in phases – first, to establish relations with potential elite members, second, to convince them of the above proposition, and third, to assist them in the breakdown of the security apparatus. Ideally, these phases would be developed according to guidelines contained in an over-arching regional strategy.

#### **Beginning a long campaign**

It is clear that the diplomatic, political, economic, military, humanitarian and expert instruments have some potential to assist, but that none of them can do the job alone. The first two phases will have to be carried out with a fully-operational security apparatus in place. For that reason, they will focus on developmental activities with Kurds and Shi'i that take place outside Iraq, in Iran and elsewhere. It will likely make use of expatriate channels and third country nationals to make contacts within the officer corps and the professional

associations. Such contacts will be facilitated by expanded business between Iraq's military and oil industry and third country nationals as the U.N. sanctions are relaxed. At the outset, then, the diplomatic and political instruments will play the foremost role by helping to obtain the cooperation of third countries – in particular, France, Russia, China and Iran. These tools can be enhanced by using the economic and humanitarian instruments to help “purchase” third country support by delivering aid and advantages. Naturally, such enhancements would have to be in keeping with any pre-existing strategies for relations with those countries.

Once contact is established, the second phase attempts to convince the “would be” elite that their interests are better served by cooperating with the other elite members to impose some form of constraint on the presidency, than by continuing to accommodate the regime. Exactly how this is carried out will depend on the individual who is being convinced, but in the case of Kurds and Shi'i, it obviously will have to involve more carrots than sticks. For example, these could include payments, promises of military supplies or training, or promises of aid packages to be delivered to particular communities after diplomatic relations are restored. Smuggling of humanitarian aid into the country and even an occasional U.S. airstrike could be put on the table. To exert influence on military officers, some sticks are available as well, such as the threat of being purged after the regime change, or found guilty of some crime.

#### **Ensuring the desired outcome**

The guarantee that this elite will ultimately impose some form of constraint on the Iraqi presidency is the promise of rapid economic rehabilitation. Although Saddam's regime can expect, under weakening sanctions, to be able to rebuild its military and eventually complete its nuclear weapon program, it will not necessarily become so prosperous that the privations now suffered by many groups – particularly the Kurds and Shi'i – will be relieved, unless a very broad recovery is permitted. It is in the U.S. interest to ensure that the Iraqi elite understand U.S. cooperation will be needed for a full economic rehabilitation, and that will be conditional upon their imposition of effective constraint upon their president. Careful watch on the economic implications of any relaxation of U.N. sanctions is therefore necessary.

In the third phase, the Iraqi elite seek to make it possible for them to debate and agree upon new controls upon their government, and to implement them. For that to be possible, they will have to degrade the security apparatus. As mentioned earlier, they are in the best position to know how to do this. However, the U.S., with its military and political instruments, can provide critical assistance. As an illustration, it is understood that the regime has not made available certain inexpensive nutritional supplements in predominantly Shi'a areas which are necessary to prevent illness and death among infants<sup>27</sup>. This sort of situation could be exploited by the U.S. to justify covert delivery of the needed supplies to the civilian population in that area. The inevitable reaction of the regime security apparatus could then be used as justification for raids against the headquarters, communications and other facilities of the apparatus itself. That “quid pro quo” could be timed and targeted to disrupt the coordination of

security in direct support of activities planned by the cooperating Iraqi elite.

### **First talk, then fight, then follow through**

Regardless of the actual form, it seems inescapable that the conflict between American and Iraqi policy can only be resolved in a process that requires a level of discussion and cooperation among the different groups that make up that country, which would be impossible under the existing repressive system. Therefore the successful strategy, at the end of the day, will comprise efforts to bring participants into that discussion and then to help them reduce the threat of Saddam's Special Security Organization so they will be free to pursue their cooperation to its logical conclusion.

The economic and expert instruments will come to the fore in that follow-through period, in an attempt to precipitate activism among the Sunni technocrats and the professional associations, who will presumably become involved in the ensuing economic rehabilitation. With increased access inside Iraq, the political tool can switch emphasis to concentrate upon students and military officers. The appeals to the aforementioned interests of these more centrist groups, with proper timing, will greatly increase the probability of a favorable outcome to the reorganization of government, which might otherwise become bogged down in differences between Kurd and Shi'i interests.

### **Iraq as an example of policy conflict and tailored war**

This rough outline of the interrelations of mutually-supporting strategies for each instrument of American power is intended to demonstrate how the new method of resolving conflict works. In this example, the evolved concept of conflict as a collision of policies, was used to develop a strategy that employed the "tailored" form of war. The conflict is resolved over a prolonged period, against a nominally peaceful background, and the only war-like measures are limited attacks – probably air attacks – against Saddam's Special Security Organization and the Ba'th party surveillance and enforcement structure. U.S. measures respect the threshold of provocation throughout the campaign. Yet it promises to succeed where total war cannot, and to prevent Saddam from effectively defeating the United States by exploiting a similar technique.

Saddam Husayn is by no means the only challenger to U.S. policy in today's world. As stated at the outset of this chapter, the Near East is full of governments which could find the flexibility of knowledge-based, tailored war to offer them significant advantages, particularly when confronting countries like the United States. The Executive Branch of the United States' government stands to benefit from an early recognition and adaptation to this evolutionary change, particularly in light of the economic and political forces at work in this new century. The U.S. Air Force, as a forerunner in the exploitation of knowledge, reach and precision, has the potential to lead the way.

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<sup>1</sup> White, op cit, p87

<sup>2</sup> National Security Strategy of Engagement and Enlargement, U.S. Govt Printing Office, Washington, DC, 1996, p2

<sup>3</sup> Fuller, J.F.C. op cit, p9

<sup>4</sup> Marr, Phebe, The Modern History of Iraq, Westview Press, Boulder, CO, 1988 p27

<sup>5</sup> ibid, p80

<sup>6</sup> ibid, p102

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- <sup>7</sup> *ibid*, p126  
<sup>8</sup> *ibid*, p187  
<sup>9</sup> *ibid*, p202  
<sup>10</sup> *ibid*, p230  
<sup>11</sup> *ibid*, p291  
<sup>12</sup> Baram, *op cit*, p103  
<sup>13</sup> Mylroie, Laurie, *The Future of Iraq*, The Washington Institute for Near East Policy, Washington, DC, 1991, p13-44  
<sup>14</sup> al-Khalil, Samir, *Republic of Fear: The Politics of Modern Iraq*, University of California Press, Berkeley, CA, 1989, p38  
<sup>15</sup> Baram, *op cit*, p129  
<sup>16</sup> Eisenstadt, Michael, *Like a Phoenix from the Ashes*, The Washington Institute for Near East Policy, Washington, DC, 1993, p52  
<sup>17</sup> *Iraq Strategy Review – Options for U.S. Policy*, Ed. Clawson, The Washington Institute for Near East Policy, Washington, DC, 1998, p1-12  
<sup>18</sup> *National Security Strategy*, p4  
<sup>19</sup> Marr, *op cit*, p94  
<sup>20</sup> Manchester, William, *The House of Krupp*, Bantam Books, New York, NY, 1969, p203  
<sup>21</sup> Mylroie, *op cit*, p13  
<sup>22</sup> *ibid*, p40  
<sup>23</sup> Baram, *op cit*, p27  
<sup>24</sup> Marr, *op cit*, p16  
<sup>25</sup> Baram, *op cit*, p105  
<sup>26</sup> *Iraq Strategy Review*, *loc cit*  
<sup>27</sup> Wasilewska, E., "Tears and Disdain," *The World and I*, April 2000, News World Communications, Washington, DC, p205-215

## **CHAPTER SIX – IMPLICATIONS FOR ARMED FORCES AND AEROSPACE POWER**

### **Section One: Implications for the national security structure**

The evolution of war, from a state of relations between countries to a level of interaction between conflicting elites, is beginning to change the way governments and would-be governments around the world handle conflict among them. Actions to persuade are increasingly accompanied by actions to coerce, including actions which are undeniably “unfriendly acts” – which is to say, meant to harm – all in the context of peacetime diplomacy. There is no declaration of war, no transition to a discrete hostile form of relations in which both sides allow their armed forces to settle an issue. The line between war and peace is becoming blurred.

#### **Executive branch reflects traditional thinking**

This will place some stress upon the national security structure of the United States government, because its layout reflects the notion that relations with other states are handled in two largely separate modes – either war or peace. This is evident in the division of the executive departments by function into defense (war) and diplomacy and trade (peace). It is also reflected in the bifurcation of intelligence responsibilities into separate branches for military and civilian purposes. As hostilities are carried out to a greater and greater degree with non-military instruments, and the use of military instruments to support and enhance these efforts falls more and more often below the threshold of clearly recognizable “war,” the effectiveness of the American executive branch layout will decrease.

At the heart of this weakness lies the very key to conflict – policy. As alluded to previously, all of a country’s activities beyond its own borders boil down to trade, tourism and the government functions of consular activities, intelligence collection and efforts to resolve conflicts in policy. Until the latter part of the 1900s, it was commonly thought that war was a fourth type of government function, which occurred when conflict resolution had failed. Now, however, the machinations of international actors around the globe reflect a proliferating understanding of war as a subset of conflict resolution – a further means of influencing the policy of one’s opponent, rather than the establishment of a fundamentally different relationship with him.

#### **A behemoth facing more nimble opponents**

Those governments in which foreign policy and military authority are inseparable – particularly those in which both are concentrated under the single hand of a strong or totalitarian leader – are best positioned to exploit this evolutionary development of war. Those in which foreign policy is entrusted chiefly to a department divorced from most of the instruments of national power, including the military, will have more difficulties. Those, like the United States, in which the policies that shape national security are divided between many separate, competing organizations, will find themselves outmaneuvered in more “tailored” conflicts each year, in what will appear to them to be cat-and-mouse

games, in which they are continuously frustrated in their attempts to deal with a conflict with either a "peacetime" tool or, alternatively, a "wartime" one. The new reality is that all tools are peacetime tools – including those that deprive, damage, kill and waste – and they are all wartime tools as well – including those that beseech, succor and mend. The continuous effort to resolve policy conflicts to the advantage of the United States now comes under increasing pressure to effectively apply all tools, in a synergistic manner, by way of rational and conscientiously-developed strategy.

The pressures that the evolved form of conflict – and tailored war, in particular – have unleashed will suggest to those with an interest in U.S. security in the 21<sup>st</sup> century that significant reorganization of parts of its executive branch will be necessary to allow strategy to transcend the functional interests and perspectives of the traditional departments. The impact of that suggestion is not predictable, but in order to illustrate the scope of these implications, some possibilities follow.

#### **Re-organize to compete**

One logical option would involve changes to the ambit of the National Security Council. As suggested in Chapter Four, the new method is best anchored in global and regional strategies, so some organ would be required to take up the task of creating and adjusting those – a task for which the NSC seems well positioned. The development of campaign strategies to resolve particular conflicts would call for other groups with a regional focus, incorporating representatives from each part of the national security structure – experts in the use of each instrument. These groups might be subordinated to the National Security Council. Certain other changes may be made to the responsibilities and procedures of all departments involved in national security, including the Unified Commanders-in-Chief. Further, since the new form of war provides a great advantage to the side that has a superior grasp on knowledge, it is imaginable that the evolution of the executive branch structure would include a thorough-going investment in intelligence and the means to make knowledge readily available to planners and decision-makers. Inevitably, this would entail a tremendous expenditure on human intelligence and military special operations for intelligence collection, as well as an appropriate analytical capability.

Although the exact form is not predictable, the rapidly growing need to focus on policy is quite likely to necessitate some fairly dramatic organizational change in the executive branch. That would permit the patient and flexible implementation of an ultimately decisive strategy that coordinates the application of all of its instruments of national power. It would also let the U.S. escape its current reliance on decisive action by a single department, and the concomitant vulnerabilities related to consensus.

#### **Section Two: Implications for the armed services**

The evolution of war, from the total or apocalyptic, to the tailored disruption of the enemy's expectations, will necessarily have implications for the armed services of the United States. By itself, the evolution would not necessarily have any significant effect upon overall force structure. However, the reprioritization of issues in Washington in the aftermath of the end of the U.S.S.R.



has had, and will continue to have, a considerable effect on military budgets across the board. Further, experts in the defense policy community forecast that fiscal constraints and budgetary procedures will combine in the near term to produce an unavoidable "defense budget train wreck" which must have drastic impact<sup>1</sup>. The fundamental question, which has been faced on several occasions in U.S. history, during demobilizations following a war, is whether the reduction in funding will be met by with new doctrine and organization which provide a useable, if limited, capability, or will a "hollow force" develop which is too small to exploit its doctrine but too large to afford training. In the context of this question, the evolving nature of war becomes highly pertinent to force structure, doctrine and modernization.

#### **Nuclear threat becomes everyday business**

A related element which bears on these same issues is the slow but steady expansion of membership in the "nuclear club." This phenomenon is not terribly worrisome from the standpoint of the likelihood of nuclear attack against the United States, Japan or NATO, since it is widely understood that the launch point of any ballistic missile will be identified within seconds, and retaliation, even if not nuclear, will be severe and unstoppable. Submarine-launched cruise missiles pose a threatening vulnerability, but the number of states that possess that capability remains quite small<sup>2</sup>. Most new nuclear-armed countries appear to be concentrating their efforts on short and intermediate ballistic delivery vehicles despite their inherent detectability, meaning that they place little premium on remaining anonymous, which would only be rational if they expected something to protect them from retaliation. That something could be that they do not anticipate ever using their weapons against someone who could retaliate, or that they imagine their doctrine will involve nuclear weapon use only when the claim of self defense might dissuade escalation.

This latter explanation, in fact, fits neatly with the possibility that many nations, having observed the surprising effectiveness of U.S. armed forces as intercontinental invaders against well-prepared defenses, are concluding that it is beyond their capabilities to ever defend against Americans by conventional means. Those in this group who suspect that their interests may well conflict with those of the United States, or who wish to be sure of maintaining a free hand in such decisions would place high value on the development of nuclear weapons. They would also seek missiles of long enough range to prevent an invader from placing a large force within their foreseen sphere of influence. They may presume that use of such weapons might be justified or necessary for self defense, and that such use, against military forces, might not provoke nuclear retaliation against their homeland. Interestingly, a few weapons on a handful of missiles is insignificant in the context of apocalyptic war, but has very great value in that of tailored, disruptive war. At the same time it has the effect of greatly complicating the employment of the sort of forces, like those of the United States, which have been designed for total war. A large, mechanized army, carrier battle groups and a highly technical, big-base air force present ideal nuclear targets. It appears likely that it is not the 50 states of the U.S. which are intended to be held at risk by small countries' development of nuclear weapons, but rather it is the

American armed forces, should they deploy on a large scale to an increasingly broad segment of the globe where this threat exists.

#### **Adapting to a different world**

All U.S. services, then, face a budget-driven requirement to reduce their force structure, and simultaneously need to re-think how they will gain access to, and operate in, areas where it is now increasingly probable that nuclear weapons would be used against them. With this requirement as a given, and the world quickly learning to view total war as an evolutionary dead end and to use their military instruments in more flexible, less traditional fashion, it seems that the time is at hand for significant adjustment to the traditional planning assumptions upon which American armed forces are based. Indeed, some efforts along these lines are already underway<sup>3</sup>. In addition to the need to reduce nuclear vulnerability, the key criteria are the very same as those which have been tied to the emergence of this new concept of war – knowledge, reach and precision.

The ability to recognize an enemy's vulnerability, to deploy directly against it from long range and in a manner that is not easily impeded with nuclear weapons, to bring precisely to bear decisive force, and then to withdraw quickly in good order – these abilities constitute the acme of adaptation to the future's predominant form of conflict. In particular, U.S. armed forces' capacity to elaborate strategies against enemy consensus must grow, as must their capability to conduct incisive operations from a dispersed, long-range deployment into unfriendly territory. Enhancement of these abilities, while retaining the foundation for protracted combat in the form of total war, should become the foremost considerations in modernization, force structure and doctrinal debates.

#### **Section Three: Implications for the Air Force**

For the Air Force, this seemingly abstract development in the philosophy of conflict has surprisingly concrete and far-reaching implications. This is, perhaps, in keeping with the fact that aerospace power itself has contributed much to the technical enhancement of knowledge, reach and precision which has set the stage for war's evolution. In particular, its ability to reach nearly any fixed target regardless of distance or enemy defenses, and the more recent accomplishment of being able to reliably damage that target without resorting to devastation of the entire area, to a large degree have determined what the new form of war looks like – sharp, unexpected, often asymmetrical and designed to affect enemy intentions as much, if not more, than capabilities.

#### **Advancement of knowledge**

To enhance its value as an instrument of national power in 21<sup>st</sup> century conflict, the Air Force must capitalize upon further technical development of its strengths in reach and precision, while searching for ways to overcome the obstacle posed by the critical importance of knowledge. The significance of knowledge in the evolved form of war is inherited directly from its roots in revolutionary war – a type of conflict in which the application of aerospace power has traditionally been quite challenging. In the context of tailored, disruptive warfare it can be considered the key ingredient in determining what to hit and with what means.

The Air Force's concern with knowledge is threefold. It must develop, in cooperation with other foreign affairs departments as well as other services, doctrine to allow the exploitation of available knowledge in crafting military strategy directed primarily against enemy intentions or perceptions. It must also attempt to develop the technical means to add to the knowledge of enemy motivations – in particular, the ability to conduct long-term aerial surveillance over hostile areas, of signals and very small targets, such as individual vehicles or small groups on foot. Such knowledge is of critical importance in unraveling relationships and sources of power within the enemy camp. Due to limited availability of human intelligence, the use of aerospace platforms to collect such information will continue to have very high importance in knowledge-based conflict, especially if it is successful in achieving long-dwell collection of such fine-grain information. The third knowledge-related concern for the Air Force is the ability of its doctrine of centralized planning to keep up with events<sup>4</sup>. It will come under considerable pressure because changes to strategic guidance promise to be more frequent in this new form of war. In addition, the enemy camp may be more agile since this type of war does not necessarily involve movement of large military units, and paralysis of the enemy's command and control is not necessarily a desirable effect. New cockpit decision aids and revision of the Air Tasking process – perhaps to the point of approaching “decentralized” or “distributed” planning – may eventually be required to realize the full benefit of aerospace power's flexibility.

#### **Advancement of precision**

The technical advancement of precision from Vietnam to Iraq was the process that signaled the arrival of a new style of war. Only with weapons such as the Paveway bombs were the armed forces at last free to exploit fully the reach offered by modern aircraft. Up to that point, the only way to absolutely guarantee that a target would be destroyed in one pass was to resort to nuclear bombs, the political and environmental consequences of which were prohibitive. The alternatives were repeated strikes and carpet bombing, which were costly, sometimes required months or years to be effective, and often involved collateral damage to an extent that is unthinkable today<sup>5</sup>. The invention of guided bombs converted the Air Force from a clumsy, costly tool to a force that could truly attack the vital internal organs of an enemy state. In the near future, the evolved nature of war will drive all air weapons, except for a few types exclusively for use against area targets like fielded ground forces and railroad yards, to be precise. The Air Force will be faced with equipping all of its platforms to handle a variety of precision weapons.

It will be best equipped for tailored war by decreasing the destructive power of the smallest weapons, to well below the 500 pound range. An effect would be useful that could destroy a downtown storefront without collapsing the entire structure, or destroy an unarmored car in a street without knocking down the adjacent building facades. Improved terminal guidance for the last one or two seconds of the weapon's flight is also highly desirable. For political and humanitarian reasons, impact fusing may be restricted from certain types of targets, requiring weapons officers to use the image from the weapon to

positively identify the target before detonation. Due to more restrictive air defense, which will be addressed in a following paragraph, the option to attach standoff motors to guided weapons of all types will provide an important operational advantage.

Finally, guidance modes other than laser, TV and GPS will serve special purposes in tailored war, including home-on-radio-emitter and home-on-moving-target. In-cockpit systems to identify target signatures or locations, including the ability to back-track artillery fire to its origin coordinates, will allow further exploitation of precision technology. Ultimately, precision is considered to be any measure which gives the ability to concentrate combat power more strongly upon a certain aim point. It can be enhanced not only by tailoring weapons effects to the target, or delivering them more accurately, but also by measures that better coordinate and more efficiently apply the available forces in the battle. In that sense, precision can not only be improved by technology, but also by adjustments to doctrine. However, from the doctrinal standpoint, by far the greatest implications for the Air Force are associated with the challenges it faces in reach.

#### **Advancement of reach**

Reach is an attribute that distinguishes the United States Air Force from all of its competitors and even sets it apart from its sister services. However, further improvements will be needed if its singular capabilities in this area are going to continue to provide a meaningful advantage to American policy in the coming decades. Today, it remains necessary for Air Force units to flock together at large, sophisticated airfields, due to the runway and service requirements of high performance aircraft, the quantity of equipment needed to support their technology, and the resulting premium on efficiencies of scale. Unfortunately, this imposes limitations on the Air Force because there are few such airfields in the world. Those that exist are often also required as a node for Army deployments, and the two service's combined demand for runway and ramp space on a small number of fields can easily result in mutual interference, as well as offering a concentration of forces that is a tempting target for nuclear or other weapons of mass destruction. The end result is that these airfields naturally become the focus of opponent strategy to deny U.S. forces access to the theater, and so long as the Air Force remains constrained by its equipment and doctrine to rely upon such fields, it will leave the U.S. vulnerable to such strategy. If Japan could be threatened into refusing to allow the U.S. to fly from its bases during a confrontation on the western Pacific rim, for example, the strategic balance of the entire region would be dramatically changed in a single blow. Had Italy and Hungary proved no more willing to host U.S. planes on their large airfields, due to domestic politics, than their ally Greece, Operation Allied Force would have been a different proposition altogether.

Access denial is the main challenge that the Air Force will face in the 21<sup>st</sup> century, whether due to a lack of useable bases, a nuclear threat, refusal of overflight requests or – more abstractly – because the political context of the conflict will not countenance a large, high-profile deployment of several squadrons of aircraft. However, Chapter Four's description of target sets and

strategy development suggests that, in tailored war, the Air Force role might amount to attacks against a small number of targets, perhaps with days or weeks between missions. This could have the effect of greatly reducing the number of aircraft required, thus introducing the possibility of a small deployment which might be dispersed to decrease its vulnerability to weapons of mass destruction. A small, dispersed force would also be more quickly deployed and brought home, while having far less "political footprint" – both valuable from the standpoint of not exceeding the threshold of provocation by too much. However, before such tactics are feasible, new capabilities must be acquired.

The Air Force therefore faces an urgent task of adapting its doctrine and, eventually, its aircraft to dispersed operations, by fewer aircraft, at longer ranges, from far-less sophisticated bases. It has already begun this by investigating the use of "reach-back" capabilities, but this is only a start. To be fully capable of operating in the context of a tailored, disruptive war – or to survive and operate, even in total war, in the face of the ever-more-common nuclear threat against any large concentration of its forces – the Air Force must look toward new doctrine. That new doctrine must permit dispersal of independent flights and even single aircraft among small airports, soft runways and highway strips with no more support equipment than is required to turn the plane. For tailored conflict, it should conceive of deployments essentially as covert positioning of no more aircraft than are needed for a single set of strikes. Modernization must take into consideration the need for short takeoffs and landings, soft field capability and unsophisticated servicing, while still placing stress on increased range. Eventually, aircraft design specialization will have to be re-considered, to decrease the number of planes required still further by reducing the need for multi-type "packages."

#### **The end of "air superiority"**

The need for dispersal away from big bases produces pressure to accomplish combat missions with fewer aircraft. That combines with the nature of tailored conflict to produce other important reach-related impacts on Air Force doctrine. As explained earlier, the opponent is likely to attempt to keep the tenor of his overall campaign below the point where a large, high-profile deployment of U.S. armed forces might be justifiable. This permits him to exert influence on the perceptions of his neighbors and on those of U.S. leaders as well, without allowing the U.S. to use its most potent tool. It is the current American inability to use its military tool in a mode other than "total war" which makes tailored conflict so promising and attractive to smaller countries. To be able to respond, the U.S. must free its armed forces from their total war orientation. For the Air Force that means deploying fewer aircraft to dispersed, primitive locations, perhaps quite distant from their targets. But it also means something even more extraordinary. It means that air campaign planners will not have the option of beginning operations by neutralizing the opponent's complete air defense network, and it means that the United States Air Force must contemplate operations in skies where they do not enjoy air superiority, much less supremacy.

#### **"The Air Campaign" outmoded**

While this may seem heretical, it is no less so than the proposition that the



Air Force has grown incapable of performing its mission in contested airspace, or that it will not get on with the task of bombing the enemy's strategic assets unless the air defense is first reduced to taking pot-shots. The now-classic, total war approach of destroying the command and control of air defense at the outset<sup>6</sup>, and then devoting a large fraction of effort to rubbing out enemy aircraft and anti-aircraft installations will simply be inadmissible. If the Air Force is to remain a valuable instrument in the sort of conflicts that loom in the future, it will have to do so within the constraints imposed by political necessity, which can be expected to allow only local, temporary degradation of defenses. Obviously, contemplation of this sort of mission, attempted with only the small number of aircraft discussed above, suggests strongly that the aircraft will require every advantage that can be built into them.

The importance of stealth and range cannot be overstated. The ability to take advantage of darkness and poor weather is equally important. A large, enclosed weapons bay is another imperative, as is the ability to monitor enemy aircraft and anti-aircraft weapons, and to fire on them pre-emptively. Air refueling and high speed are highly desirable, along with suitability for the bare base described above. Two or more engines would significantly increase the probability of return after sustaining battle damage (which is more likely in this operational environment).

#### **Alternative operational concepts**

Other reach-related operational concepts that would adapt the Air Force to the constraints it will face in coming years include stealth tankers, aerial re-arming, unmanned combat air vehicles, stealth SAR, precision airdrop and the elimination of ground fueling at forward locations. A review of the viability of current AWACS tactics and capabilities in contested airspace may also be needed. Certainly, if deployment of AWACS is not practical due to political constraints, threat level or simple geography, then the few aircraft that are deployed to protect the bombers will have to have similar high performance characteristics, specialized for air-to-air combat a long distance from base, against greater numbers, without the help of airborne weapons controllers.

It bears repeating, in conclusion, that the challenge facing the United States consists of the growing ability and apparent willingness of less-powerful states to take advantage of the relatively rigid, traditional U.S. conceptions of war and peace. By concentrating on exerting influence on their neighbors over a long term, through a continuously-shifting application of hostile and even hurtful, war-like measures – but always carefully refraining from justifying U.S. military reprisal – they work against American interests with impunity. To reverse this, the U.S. must recognize that conflict has evolved beyond the concept of total war upon which its armed forces are based. It must prepare corresponding and countervailing doctrine and capabilities. Nonetheless, the threat of total war remains, and the armed forces of the United States must at all costs preserve the capacity to meet that threat in a timely manner.

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<sup>1</sup> Goure, Daniel, op cit

<sup>2</sup> New World Coming, op cit., p7



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<sup>3</sup> Wolfe, Frank, "HAC Defense Panel Adds \$1.1 Billion For Army Transformation," Defense Daily, 12 May 2000, p1

<sup>4</sup> McNamara, Stephen J, Air Power's Gordian Knot, Air University Press, 1995, p39

<sup>5</sup> US Strategic Bombing Survey, European/Pacific Summary Reports, Air University Press, 1987 (reprint), pp31, 90

<sup>6</sup> Warden, John A. III, The Air Campaign, National Defense University Press, 1988, p51-55